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DESIGN DESCRIPTION OF THE
ADVANCED TECHNOLOGY UNIT TRAINING AND MANAGEMENT SYSTEM (ATUTMS)

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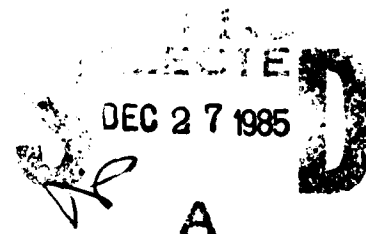DEC 2 7 1985

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A computer-based management information system was designed to assist unit training at the battalion level. A prototype system was successfully implemented and made operational within a host battalion of the U. S. Army. This Design Description documents the hardware and software design of the prototype.

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ACRONYMS

ABF	Application By Forms
ATUTMS	Advanced Technology Unit Training Management System
DCL	DEC Command Language
DEC	Digital Equipment Corporation
EDT	Editor
EQUEL	Embedded Query Language
MOS	Military Occupational Specialty
OSL	Operations Specification Language
PAC	Personnel Administration Center
QBF	Query By Forms
QUEL	Query Language
RBF	Report By Forms
UIC	Unit Identification Code
UPC	Unit Processing Code
VAX	Virtual Address Extension
VMS	Virtual Memory System

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SECTION 1

ATUTMS SYSTEM DESCRIPTION

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This manual documents the design and implementation of the Advanced Technology Unit Training Management System (ATUTMS). It is intended for use by programmers, analysts and operators who are responsible for maintaining or developing system software. It will also be useful to anyone interested in the internal design and operation of the system. Keywords: ⟶ to 1473

1.1 SYSTEM OVERVIEW

The ATUTMS system was designed and implemented by the Jet Propulsion Laboratory (JPL) under contract to the Army Research Institute (ARI) to provide modern information management capabilities at the battalion level.

ATUTMS consists of three major application areas: Personnel, Training and Logistics. Supporting them is a Utilities application which provides general utility routines and data definitions. Although each of these areas requires a separate user interface, they are all based on a single integrated relational database. This document describes the design and implementation of the data base and the applications which use it.

1.1.1 Hardware Environment

ATUTMS was developed on a DEC VAX/11-780 and installed on a VAX/11-750. Peripheral equipment includes a RA-81 disk drive, a TU-80 tape drive, an LA-100 Console, an LQP02 printer, and CIT-101 terminals (VT100 compatible). CIT-1550B dot matrix printers are available at most terminals and serve as the primary hard-copy output devices.

1.1.2 Software Environment

ATUTMS was implememented using the INGRES relational database management system version 2.1/5 and various INGRES development and user interface tools. These include Application By Forms (ABF), Query By Forms (QBF), Visual Forms Editor (VIFRED) and the INGRES Report Writer. ATUTMS also makes extensive use of the INGRES EQUEL/FORTRAN preprocessor and VAX-11 FORTRAN.

Most procedures, forms and reports were developed and now operate in the ABF environment. This version of INGRES requires VMS level 3.0 or above. The full screen data entry and retrieval methods used by ATUTMS via INGRES require use of VT100 compatible terminals. The 230 column format of many of the reports requires use of printers with a 17 cpi capability.

1.2 STRUCTURE OF THIS DOCUMENT

The next several sections serve as a guide to using this document by providing an outline of the sections on Software Configuration, Database Overview, Applications, and System Operations. A brief note is included with each outlined section indicating what type of information the section contains and how it can be used.

1.2.1 Software Configuration

This section documents the installation of ATUTMS and the location and structure of the various ATUTMS directories and subdirectories. System-wide naming conventions are also discussed. This section should be read before attempting any system modifications or maintenance.

1.2.2 Database Overview

This section provides an overview of the structure of the database at the conceptual and logical levels. The physical design is detailed in the sections on specific applications. This section shows how the separate applications are integrated by the data they share.

1.2.3 Applications

A separate section is provided for each application. However, the structure used for each is identical and is discussed below. Information is presented at high, intermediate and detailed levels with each level serving as an introduction to the next. The lowest level of documentation in this manual is provided by a data dictionary which identifies and explains each table, report, and procedure referenced by the applications. The dictionary also specifies the names of source code files where appropriate. The directories containing these files are identified in Section 2. The source code files also contain detailed documentation.

1.2.3.1 Application Overview

The application overview defines the purpose of the application and identifies any procedures or techniques peculiar to that application.

1.2.3.2 Design Philosophy

The approach taken during design and implementation is outlined and explained.

1.2.3.3 Block Diagram

The block diagram provides a very high-level look at the major components of the application and shows its relationship to the rest of ATUTMS.

1.2.3.4 Structure Diagram

The structure diagram provides an intermediate level view of the application by providing a calling tree which shows the general sequence in which procedures, tables, reports and forms are referenced by the application. This serves as an index for the detailed information which follows. If, for example, an error is detected in an application, the structure diagram allows an analyst to quickly identify the program element involved and see its relation to other elements within the application which may be contributing to the problem.

1.2.3.5 Table Dictionary

The Table Dictionary identifies each database table (file) used primarily by the application under discussion and explains its use. A sorted listing of all tables in the database is available in Appendix A. Each field within each table is also identified and documented in Appendix B. A cross reference of fields to tables across the entire database is available in Appendix C. The assignment of tables to particular applications is for convenience of explanation only. The integrated nature of the data should not be forgotten.

1.2.3.6 Report Dictionary

The Report Dictionary identifies the reports available within each application and identifies the tables upon which they are based. Any unusual procedures used to generate the report are noted.

1.2.3.7 Procedure Dictionary

The Procedure Dictionary identifies any procedures written in a programming language which are used by the application. The purpose of each procedure is defined and any unusual algorithms or techniques are noted.

1.2.3.8 Special Operations and Maintenance Procedures

Special procedures include any software used by an application but not integrated into the executable program built using ABF. Most of these are special purpose or maintenance procedures. These procedures are not shown in the structure diagram.

1.2.3.8.1 Canned Queries

Canned queries are procedures written in QUEL, the INGRES query language. They are not used frequently enough to justify integration into the ABF application. Also, some queries are of an ad-hoc nature and not suitable for integration into a formal application environment. Most are called via DEC Command Language (DCL) command procedures.

1.2.3.9 Development Notes

This section provides the software developer a place to record any notes or hints which may help with the further development of this application.

1.2.4 System Operations

This section provides details of routine maintenance operations which must be performed periodically by the computer operator.

1.3 SUPPORTING DOCUMENTS

Supporting documents are provided by Jet Propulsion Laboratory (JPL), Relational Technology Inc. (RTI), and Digital Equipment Corporation (DEC).

User Requirements for ATUTMS	JPL
ATUTMS Users Guide	JPL
INGRES Installation and Operations Guide	RTI
INGRES Reference Manual	RTI
INGRES Report Writer Reference Manual	RTI
INGRES RBF Users Guide	RTI
INGRES VIFRED Users Guide	RTI
INGRES QBF Users Guide	RTI
INGRES ABF Users Guide	RTI
EQUEL/FORTRAN Users Guide	RTI
VAX/VMS Command Language Users Guide	DEC
VAX-11 FORTRAN Language Reference Manual	DEC
VAX-11 Utilities Reference Manual	DEC
VAX/VMS System Management and Operating Guide	DEC

SECTION 2

ATUTMS SOFTWARE CONFIGURATION

This section describes the location and structure of the ATUTMS software directories. Naming conventions, installation requirements and the relationship between ATUTMS software and INGRES software are also discussed.

2.1 MODIFICATIONS TO VMS SYSTEM FILES

Two simple modifications to VMS system files are required to identify ATUTMS to VMS and make its resources available to users.

2.1.1 System Startup File - SYSTARTUP.COM

The disk on which the ATUTMS directory resides must be identified whenever the VAX is booted. The following line must therefore be added to the system startup file SYS$MANAGER:SYSTARTUP.COM :

    $ DEFINE/SYSTEM SYS_ATUTMS __deviceid:

where "deviceid" is the identification code of the disk being used (i.e., DUA0).

2.1.2 System Login File - SYSLOGIN.COM

The symbols and assignments needed by a user to run ATUTMS must be defined at every login. Accordingly the following line must be added to the system login file SYS$MANAGER:SYSLOGIN.COM :

    $ @SYS_ATUTMS:[ATUTMS]ATUTMS.COM

The command procedure ATUTMS.COM is described in Section 2.2.1.1.

2.2 THE ATUTMS DIRECTORY

All ATUTMS software resides in the directory SYS_ATUTMS:[ATUTMS] and in the subdirectories below it. The files at the [ATUTMS] level apply to the system as a whole. The subdirectories contain files specific to an application or function.

2.2.1 ATUTMS Symbols and Definitions

2.2.1.1 The ATUTMS Startup File - ATUTMS.COM

The ATUTMS startup file SYS_ATUTMS:[ATUTMS]ATUTMS.COM is a DCL command procedure invoked from the VMS system login file each time a user logs in to the VAX (Sec. 2.1.2). It contains all the symbols and assignments needed to run ATUTMS. This file can be easily modified if a new symbol is required for ATUTMS usage or some feature must be deactivated while maintenance is conducted.

2.2.1.2 The ATUTMS Login File - MAINMENU.COM

The ATUTMS login file SYS_ATUTMS:[ATUTMS]MAINMENU.COM is a DCL command procedure which presents the top level menu of ATUTMS functions to the user when he enters the command "MENU" at the VMS level. This is the main entry point to the ATUTMS system. The MENU command is defined in the ATUTMS startup file ATUTMS.COM discussed above.

2.2.2 The ATUTMS Mail Box and Tracking Changes

All anomalies, corrections, and modifications to ATUTMS software should be recorded in the ATUTMS mail box SYS_ATUTMS:[ATUTMS]MAIL.MAI via the VMS MAIL utility. Inclusion of appropriate key words in the mail subject line permits use of MAIL's search command in tracking problems. This information is not included in the database in order to provide an independent means of storing anomaly reports.

2.2.3 Application Subdirectories

As noted in the Introduction, the ATUTMS database has three major applications or user interfaces: Personnel, Training and Logistics. A fourth application, Utilities, provides services and functions which are shared by the three main applications. A separate subdirectory is provided for each of these applications. Each subdirectory is named for its application. For example, the Training subdirectory is called [ATUTMS.TRAINING]. The types of files found in these directories are explained in the sections which follow. Details about the directories' contents are given in the section dealing with each application.

2.2.3.1 Table Create Files (.CRT)

Files with a .CRT extension contain definition of INGRES tables in the form of a QUEL CREATE statement. If a table needs to be modified, first its create file should be edited. Then, using the QUEL INCLUDE command, the CRT file can be loaded into INGRES' query buffer and executed. However, the data in the table being changed first must be saved in a temporary table and then

reloaded back into the new version of the original table. A sample session follows which assumes that a new column has been added to the CREATE statement for the table Units in the file UNITS.CRT. The installation of the new version of the table could look like this:

```
$ INGRES atutms
* retrieve into tmpunits(units.all)\g    /* Save data in temporary table */
* destroy units\g                         /* Destroy current table */
* \i units.crt                            /* Load the .CRT file */
* \g                                      /* Execute the new CREATE */
* append units(tmpunits.all)\g            /* Restore the data */
* destroy tmpunits.all\g                  /* Destroy the temporary */
* \quit                                   /* Exit INGRES */
$
```

2.2.3.2 Report Writer Files (.RW)

Files with a .RW extension contain report definitions. Using the Report Writer directly is much more efficient than using RBF. To aid in formatting, most .RW files have a few dummy lines of output entered in a comment block at the end of the file. These dummy lines are extremely useful in formatting print statements for headers and column alignments for data. Many reports use the maximum available 230 columns on standard 14 inch paper and therefore require printers with a 17 cpi capability.

2.2.3.3 EQUEL Procedure Files (.QF)

Files with a .QF extension contain EQUEL/FORTRAN code. EQUEL stands for Embedded QUEry Language and permits you to use INGRES statements and forms handling commands from within FORTRAN. The EQUEL preprocessor converts these statements to standard FORTRAN before the compiler is called. The .QF extension tells ABF which preprocessor and compiler to use. EQUEL/FORTRAN routines are used in ATUTMS to handle the more complicated features of the user interface which ABF, OSL (the Operations Specification Language used by ABF) and QBF could not provide. It is also used to generate temporary tables required by some of the more complicated reports.

2.2.3.4 Storage Structure Modification Files (.MOD)

Files with a .MOD extension contain INGRES MODIFY statements. These statements modify the storage structure of tables by building index files which are used to speed up retrieval of the data. These files periodically must be rebuilt to reflect changes in the database. The .MOD files are discussed in detail in each application in the section on Maintenance. The index files for the table Event can be rebuilt as in the following example:

```
$ set default [atutms.training]
$ INGRES atutms
* \i event.mod
* \g
* \quit
```

$

Note that only the database owner or an INGRES super user can execute MODIFY statements.

2.2.3.5 Permit Files (.PMT)

Files with a .PMT extension contain INGRES PERMIT statements which are used to specify which users are authorized to access specific tables in the data base. Whenever personnel are transferred into or out of positions where they must use ATUTMS, the .PMT files must be updated using a VAX editor such as EDT. Each application has its own set of .PMT files. The following example assumes that the permit file for the Soldier table has been modified using EDT. The updated file is then submitted to INGRES for execution as follows:

```
$ set default [atutms.personnel]
$ INGRES atutms
* destroy permit soldier all\g          /* Remove the old permits */
* \i soldier.pmt                        /* Include the new permit file */
* \g                                    /* Execute the new permits */
* \quit
$
```

If possible, permits should not be changed during peak system usage hours to avoid interrupting use of the database.

2.2.3.6 Command Procedures (.COM)

Files with the .COM extension are standard VMS command procedures written in DCL. They provide a variety of services and are documented in each in the application.

2.2.3.7 Executable Images (.EXE)

Files with a .EXE extension are standard VMS executable image files. There is one main image for each application. These images are built using the ABF IMAGE command on the main ABF menu. ABF automatically calls the Linker and specifies which of the standard INGRES libraries are to be referenced by the Linker. See the section below on Linking Applications. These are the images invoked when a user enters the $ MENU command and selects an application.

2.2.3.8 Object Libraries (.OLB)

Files with an .OLB extension are object libraries which contain the compiled versions of the VIFRED forms that are displayed by an application. Compiled forms are included directly in an application when it is linked and can therefore be displayed more quickly than dynamically loaded forms. Forms are compiled from the Catalog menu of VIFRED and loaded into the .OLB files using the vax LIBRARIAN utility. These libraries must be available when building an executable image of an application. A library of EQUEL/Forms routines is also available in the Utilities application. See the section below on Linking Applications for more details.

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2.2.3.9 Help Subdirectory

The majority of the on-line help messages displayed when the user of an application selects the Help option from a menu are contained in files located in the directory SYS_ATUTMS:[ATUTMS.HELP]. These files are ordinary text files created with EDT and have the extension .HLP. The logical name ATUTMSHELP is assigned to this directory to provide a reference for the routines which access help files. A few help messages are contained on forms created by VIFRED and called by ABF and are therefore not contained in this directory.

2.3 IMPLEMENTATION NOTES

This section documents various procedures and techniques developed and adopted during the implementation of ATUTMS which pertain to all applications.

2.3.1 Linking Applications

As noted above, executable images of an application are built selecting the Image item on the main ABF menu. While ABF will automatically point the linker at the INGRES system libraries, libraries containing compiled forms and compiled utility routines (.OLB files) must be specified in a linker option file with the logical name ING_ABFOPT1 assigned to it. This assignment is made in the command procedure ATUTMS.COM discussed above.

2.3.2 Complex Reports

Many of the reports generated by ATUTMS require creation of intermediate tables in order to assemble the amount of information required by a report. Therefore, a separate procedure, usually written in EQUEL/FORTRAN, must be called before the Report Writer is actually invoked. When finished, a temporary table will be available for containing data in a reduced form that the Report Writer can handle. This accounts for the various temporary tables named for reports which exist in the database. It also shows up in the extra procedure called in the OSL code for many report frames.

SECTION 3

ATUTMS DATABASE OVERVIEW

3.1 DATABASE DESCRIPTION

The database is organized into tables consisting of rows and columns. Each table describes a different situation or entity that the applications want to track in the database. Some tables are used only in one application area while others are shared between the different areas.

In Personnel, the main table is the SOLDIER table. As soldiers arrive in the battalion, the Personnel Administration Center (PAC) appends a row to this table. The fields in the SOLDIER table are divided into four categories: personal data, qualifications, unit-related data, and service- related data. The STATUS table contains an entry for each soldier who is not present for duty and present for training. The DRIVERS table has an entry for each type of license for each driver and the PRP table has a row for each soldier in the PRP program. The SPECIAL table holds individuals who have some special condition or have a pending unfavorable action. The OMTOE is the personnel portion of the MTOE. Its rows correspond to authorized or required personnel positions in the battalion. The battery and section names are in the UNITS table. Both the SOLDIER and UNITS tables are used in the training schedule and to record training scores. There are also several smaller tables which contain allowable values for fields in the SOLDIER, STATUS, and SPECIAL tables.

In Training, the EVENT table defines the time and place for an individual or collective training event. The type of training and the specific missions and tasks are in the ARTEP, MISSION, and TASK tables. Collective and individual tasks have been combined so that ARTEP contains either the ARTEP or the type of individual training, such as MOS or common. The MISSION table has either the specific MOS or the ARTEP mission, and the TASK table has the tasks that belong to each MOS or mission. Participants are scheduled for events by the EVENTSOLDIER and EVENTUNIT tables. There is an entry for each participant in each event. Individual soldiers are in EVENTSOLDIER and units are in EVENTUNIT. EVENTTASK specifies which tasks are scheduled for an event. The scores for individual training are in SOLDIERSCORE and the scores for collective training are in UNITSCORE.

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In Logistics, the main equipment table is LOHAND. It has a row for each serial numbered piece of equipment and a row for each hand receipt holder for the non-serial numbered equipment. Its fields include bumper number, line, national stock number, serial number, quantity on hand, hand receipt holder, and the sequence number on the materiel condition status report (2406). The social security number for the current hand receipt holder is in LOHOLDER. The LOLINE table gives all the information pertinent to an equipment line number like description and model, and the LONSN table gives all the information pertinent to the stock number like price and technical manual. The LOSERVICE and LOREPAIR tables correspond to the preventive maintenance schedule and record (DD Form 314). They record the schedule of services and maintenance history for 314 reportable equipment. LODOCREG is the document register and LOPLL is the prescribed load list. The equipment portion of the MTOE is kept in EMTOE.

The major key used to combine data from tables is the Social Security Number(SSN). The SSN field of the SOLDIER table provides links to individual scores in the table SOLDIERSCORE and to specific pieces of equipment via the SSN field of the table LOHOLDER. The Position field of the SOLDIER table provides a link to the TOE table (OMTOE) via the OMTOE Pos field. The national stock number (NSN) plays an important role in Logistics.

3.1.1 Security

Security is provided at the operating system level by the standard VMS password and User Identification Code (UIC) based protection system. Within the database, INGRES provides varying levels of protection via the permit (.PMT) files described in Section 2 Configuration and in Section 4 for each application. In general, an ATUTMS user is only allowed to view data pertaining to his own battery. Furthermore, access to data is also limited by function. A Logistics clerk, for example, cannot update personnel data even for someone in his own battery. Exceptions are made for battalion staff officers and their representatives. See the documents User Requirements for ATUTMS, the ATUTMS Users Guide and the INGRES Reference Manual (PERMIT command) for more details.

3.1.2 Database Diagram

A conceptual view of the ATUTMS database is shown in Figure 3-1. The boxed items represent major tables in the database while the lines indicate which tables are directly related. The main tables are EVENT, for Training, SOLDIER, for Personnel, and HAND (Handreceipt), for Logistics. These tables and relationships are explained in more detail in the sections which follow.

Figure 3-1. ATUTMS DATABASE CONCEPTUAL VIEW
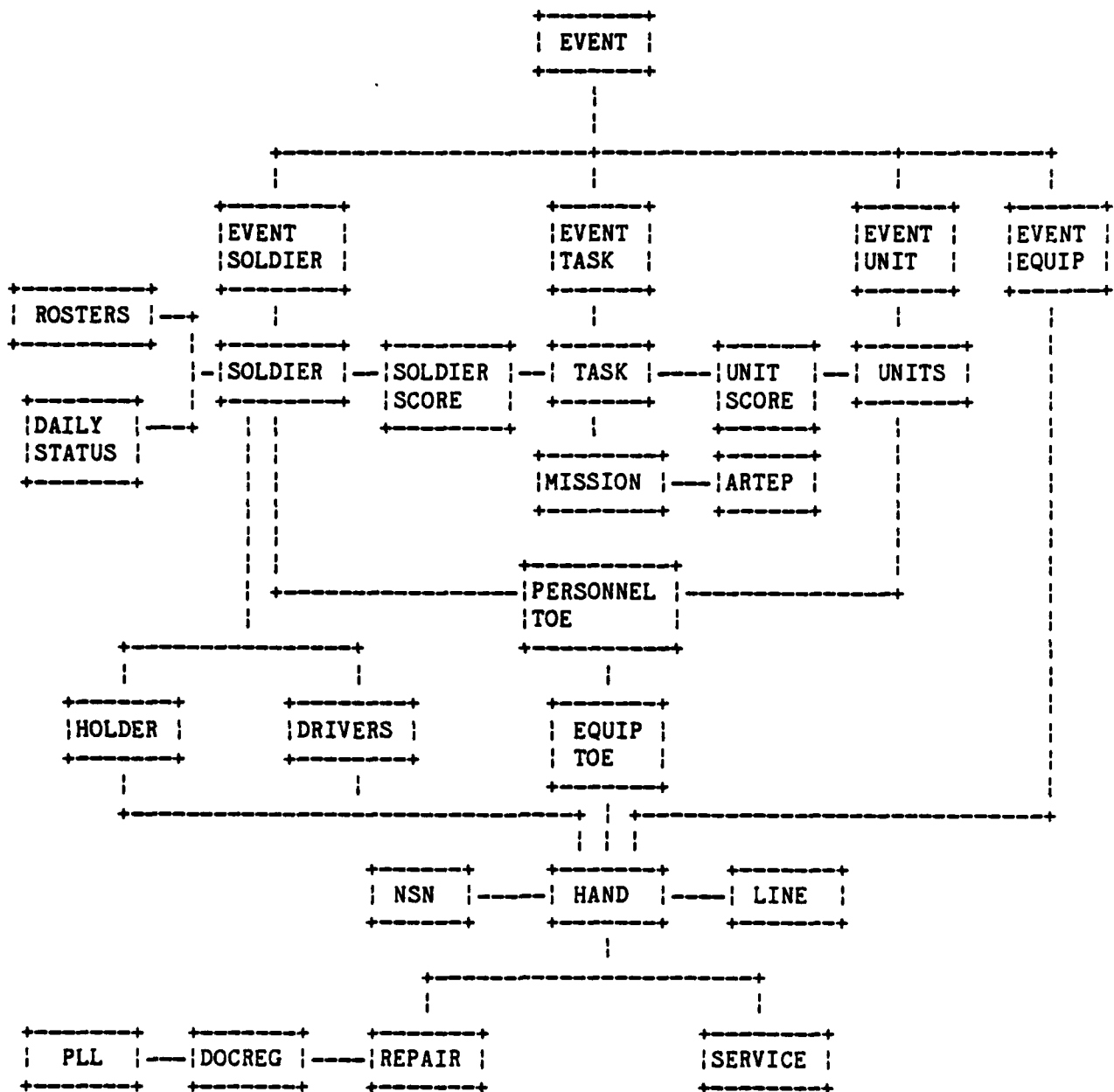
SECTION 4

PERSONNEL APPLICATION

The Personnel application consists of all individual soldier information except training scores. It also includes rosters of individuals who belong to some special program or who have some special status. The daily duty and training status is contained in a separate table called STATUS. The personnel portion of the Table of Organization and Equipment is included under Personnel. It is used to compare assigned to authorized and required positions for many of the reports. In addition, there are several ancillary tables which contain allowable values of fields in the SOLDIER table or allowable statuses in the STATUS or SPECIAL tables. The reports are the most complex part of Personnel. They pull data together from all the tables using joins and outer-joins.

4.1 DESIGN PHILOSOPHY

There were several guiding principles in the design of the Personnel application. One was to make it easy to understand and immediately useful at the battalion level. Therefore, some fields in SIDPERS were omitted and other fields from within the battalion were added. In several cases, codes for a word or phrase were discarded to increase readability, and an on-line Help facility is available in the menus to explain each step.

Another principle was to keep the application easy to modify. New fields could become important as battalion reporting requirements change or old fields could take on new values. Since QBF is fairly easy to modify, it is used most often as the data entry and update mechanism. There are two exceptions to this approach: appending and deleting a soldier. In each case, additional data manipulation is necessary to keep the database consistent. An EQUEL/FORTRAN procedure is used to display and read the form and then do the additional processing.

The rosters are separate tables which repeat the name and Social Security number to link back to the SOLDIER table. Since each roster has many fields that are appropriate to only a subset of the battalion, they are represented as separate tables rather than putting all the fields in the SOLDIER

table. To prevent update anomalies when appending and deleting soldiers, EQUEL procedures which can check all appropriate tables are used instead of QBF.

Since the easiest way to retrieve a soldier is to enter a part of his name with the wildcard character(*), the STATUS and DRIVERS tables are loaded with the whole battalion. This way the user can retrieve an individual and give him a status or a drivers license without having to spell his entire name or remember his Social Security number.

Personnel reports are dynamically calculated each time to ensure that the data shown on the report accurately reflect the state of the database. This means that the procedures that create the temporary tables for the reports have to run before the report each time. This results in a two-step process for running reports.

4.2 BLOCK DIAGRAM

A high level view of the Personnel application and the portions of the database on which it is based is presented in Figure 4-1. The top third of the diagram illustrates the interface used to enter and update personnel and status information and generate summary reports. The middle portion of the diagram identifies the major tables referenced by Personnel. The SOLDIER table provides all basic data applicable to an individual soldier except for training scores. The STATUS table holds information on current duty status while the various roster tables show special assignments. The Personnel Table of Organization and Equipment (known internally as OMTOE) and the SIDPERS table are both periodically updated with input from external systems as the structure of the battalion is changed and as personnel arrive and depart. The bottom third of the diagram identifies the tables through which Personnel is most closely linked to Logistics and Training.

Figure 4-1. PERSONNEL BLOCK DIAGRAM
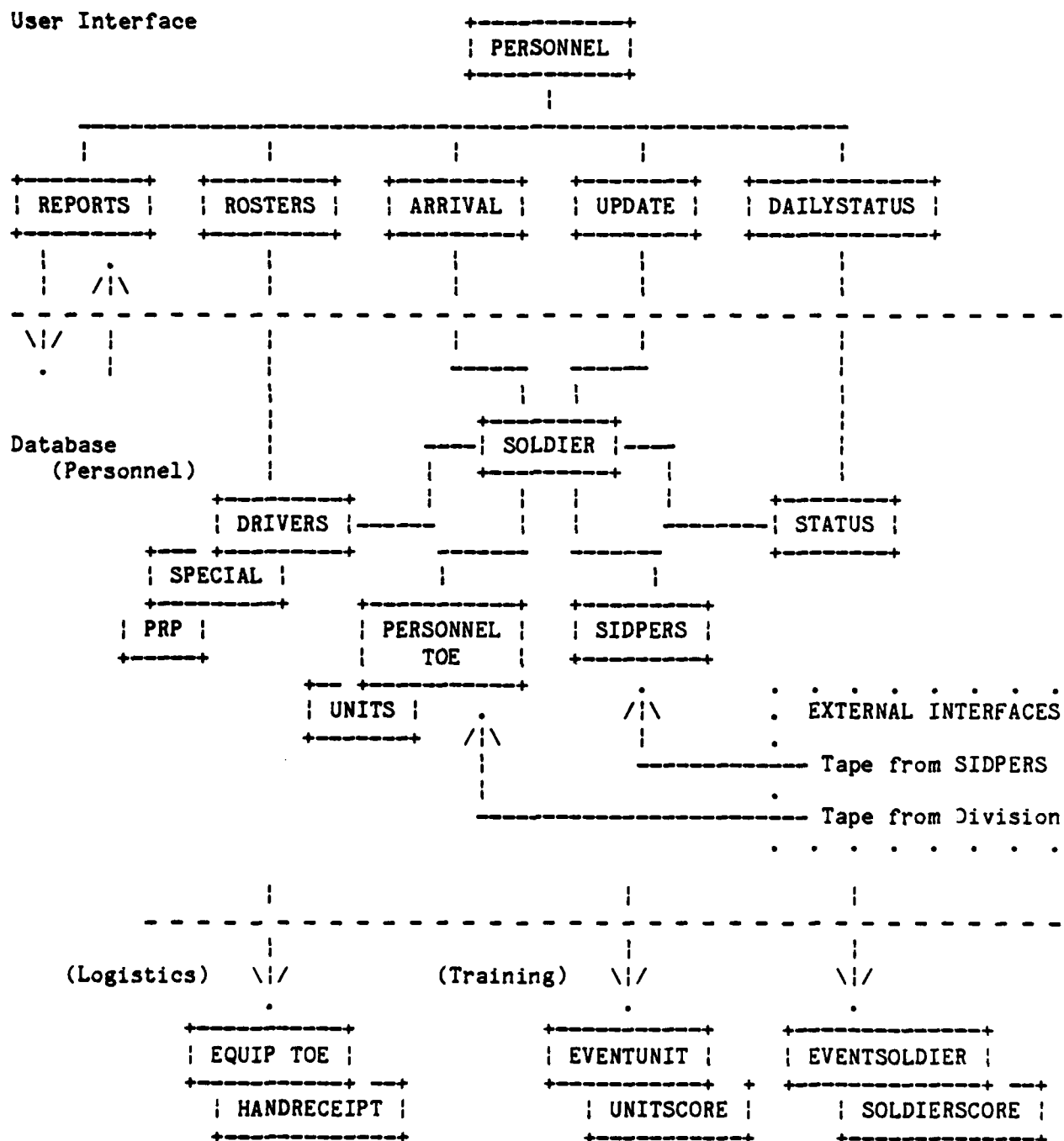
4.3 STRUCTURE DIAGRAM

The internal structure of the Personnel application is presented in Figure 4-2 in terms of the frames (menus), forms, and FORTRAN procedures used to define it. The hierarchy of the flow of control is indicated by the indentation on the left. For more information about any item in the figure, refer to the dictionaries in the sections which follow. Note that in some cases, a frame may have more than one entity associated with it. This occurs, for example, when a set of procedures are called in series.

Figure 4-2. PERSONNEL APPLICATION STRUCTURE

FRAME NAME	ENTITY NAME	TYPE	DESCRIPTION
MAINMENU	MAINMENU	MENU	Main Personnel menu
MAINHELP	MAINHELP	FORM	Help for main menu
FORMHELP	FORMHELP	FORM	Help on how to use forms
DAILYHELP	DAILYHELP	FORM	Help on Daily Status
NEWMENU	NEWMENU	MENU	New arrivals menu
NEWHELP	NEWHELP	FORM	Help for new arrivals
SOLDIERDD	SOLDIERDD	FORM	Field dictionary for SOLDIER
ADDSOLDIER	ADDSOLDIER	PROC	Assign new soldier (QBF-style)
	ASSIGNED	FORM	Compiled form for appending
	APPENDFORM	PROC	Display loop for ASSIGNED form
ATTACHED	ATTACHED	FORM	Attach new soldier QBF form
SDGAIN	SDGAIN	FORM	Special Duty Gain QBF form
UPDMENU	UPDMENU	MENU	Update/Retrieve menu
UPDHELP	UPDHELP	FORM	Help for updating/retrieving
UPDPOSITION	UPDPOSITION	FORM	Position or unit change form
DELSOLDIER	DELSOLDIER	PROC	Delete/Detach a soldier
	DEPART	FORM	Form used to delete/detach
UPDSOLD	UPDSOLD	FORM	Whole soldier record QBF form
UPDPERS	PERSONAL	FORM	Personal data portion of SOLDIER
UPDQUALS	QUALS	FORM	Qualification data portion of SOLDIE
UPDUNIT	UNITDATA	FORM	Unit related data in SOLDIER
UPDSERVICE	SERVICE	FORM	Service related data in SOLDIER
STATUS	STATUS	FORM	Daily Status input/update form
ROSTERMENU	ROSTERMENU	MENU	Special rosters menu
ROSTERHELP	ROSTERHELP	FORM	Help for rosters
DRIVERS	DRIVERS	FORM	Append/Update/Retrieve drivers
PRP	PRP	FORM	Append/Update/Retrieve PRP members
SPECIAL	SPECIAL	FORM	Append/Update/Retrieve special roste

FRAME NAME	ENTITY NAME	TYPE	DESCRIPTION
RPTMENU	RPTMENU	MENU	Reports menu
RPTHELP	RPTHELP	FORM	Help for reports
DAILY STATUS			The Daily Status report consists of:
DAILYSTATUPD	DAILYSTATUSUPD	PROC	Create DAILYSTATUS table
DAILYSTAT	DAILY_STATUS	REPORT	Front side of Daily Status report
DAILYPRT	DAILYPRT	PROC	Print report
DAILYDET	DAILY_DETAIL	REPORT	Back side of Daily Status report
DAILYDETPRT	DAILYDETPRT	PROC	Print report
ROSTER			The Personnel roster consists of:
BNUPD	BNUPD	PROC	Create BNPERSONN table
BNPERSONN	BN_PERSONNEL	REPORT	Battalion or battery personnel roster
BNPRT	BNPRT	PROC	Print report
PRP			The PRP roster report consists of:
PRPRPT	PRPRPT	REPORT	Personnel Reliability Program report
PRPPRT	PRPPRT	PROC	Print report
UNITMAN			The Unit Manning report consists of:
UNITUPD	UNITUPD	PROC	Create UMR table
UNITMAN	UNIT_MANNING	REPORT	Battalion or battery UMR report
UMRPRT	UMRPRT	PROC	Print report
SKILL			The Skill Inventory consists of:
SKILLUPD	SKILLUPD	PROC	Create the SKILLINVTRY table
SKILLINV	SKILL_INVTRY	REPORT	Frequency table of MOS vs Grade
SKILLPRT	SKILLPRT	PROC	Print report
INDIVIDUAL			The Individual report consists of:
INDVDUMP	INDVDUMP	REPORT	Individual soldier record report
INDVPRT	INDVPRT	PROC	Print report
MTOE			The MTOE report consists of:
OMTOE	OMTOE	REPORT	The modified TO&E report
OMTOEPRT	OMTOEPRT	PROC	Print report
QRYMENU	QRYMENU	FORM	Query/update supporting data menu
QRYHELP	QRYHELP	FORM	Help for supporting data queries
STATUSCODES	STATUSCODES	FORM	Daily Status report codes
ROSTERCODES	ROSTERCODES	FORM	Special roster condition codes
RELIGIONCODE	RELIGIONCODE	FORM	Religion names and codes
GRADERANK	GRADERANK	FORM	Corresponding grades and ranks
MILEDCODES	MILEDCODES	FORM	Military Education names and codes
CIVEDCODES	CIVEDCODES	FORM	Civilian Education names and codes
UNITNAMES	UNITNAMES	FORM	Battery and Section unit names
SCTYSTATS	SCTYSTATS	FORM	Security Investigation statuses
CLEARANCE	CLEARANCE	FORM	Security Clearance codes
MAIL			The link to MAIL consists of:
MAILCALL	MAILCALL	PROC	Spawn a command procedure
ENDMAIL	ENDMAIL	FORM	Form to exit and refresh screen

4.4 TABLE DICTIONARY

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents
ASSIGNED	view	Subset of the fields in the soldier record that are used to assign a new soldier.

The assigned view was used to generate the form for assigning a new soldier.

Table	Type	Contents
ATTACHED	view	Contains fields in soldier table used if a soldier is attached.

This view was used to generate the form for attaching a soldier.

Table	Type	Contents
BATTERYCODES	data	Translation of battery mnemonics to UPC and UIC codes.

This table translates battery mnemonics to UIC and UPC codes. For example, battery A is equivalent to UPC DGLAO.

Table	Type	Contents
BNPERSONN	data	Temporary table used by report Bn_personnel.

Table	Type	Contents
CIVEDCODES	data	Civilian education codes.

This table was used to translate the SIDPERS codes into a more English-like description in the SOLDIER table. It is also used to validate input to the SOLDIER table.

Table	Type	Contents
CLEARANCE	data	Contains codes for security clearances.

This table is used in two places. First, it is used to translate the SIDPERS fields to fields in the SOLDIER table and second, it is used to validate data entry for the SOLDIER table.

Table	Type	Contents
CONDITIONS	data	Contains codes for special conditions roster and including deployability.

This table is used to validate input to the special conditions roster and also to determine deployability on the unit manning report.

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents
DAILYRPT	data	Temporary table used in generating Daily Status Report.
DAILYSTATUS	data	Temporary table used by report Daily_status.
DRIVERS	data	This table identifies drivers and the types of licenses they hold.

There is a separate row in this table for each license. It contains the type of license, such as JEEP, 5 TON, TMP; the license number; position (assistant or primary); and the bumper number of the vehicle. It is used in the battalion roster report.

DRIVSSNX	index	Index on table "drivers".
GRADES	data	This table cross-references grade with rank.

This table is used to create the grade field in the SOLDIER record from the rank field in the SIDPERS table and also to validate input to the SOLDIER table.

GTRPT	data	Temporary table used to generate GT score report.
MILEDCODES	data	Military education codes.

This table is used to translate the codes in the SIDPERS table to a more English-like description in the SOLDIER table.

MOS	data	Current MOS codes available in the battalion. Temporary table.

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents
MPCCODES	data	This table assigns a non-alphabetic sort sequence to military position codes.

The Military Position Codes are O for Officer, W for Warrant Officer and E for Enlisted. This table permits sorting of individuals in the non-alphabetic sequence O, W, E.

Table	Type	Contents
OMPOSX	index	index on OMTOE for position
OMTOE	data	Personnel portion of the Modification Table of Organization and Equipment

Contains a row for every authorized position. The position code is the link to the soldier table to identify what position an individual occupies. Since each authorized position is a separate row, the required quantity could contain a fraction if the required quantity is different from the authorized quantity. There is also a row for any position that is required, but not authorized and some that are not required now, but have been or will be.

Table	Type	Contents
PERSONAL	view	Contains those fields in the soldier record of a personal nature

This view was used to generate the form for updating personal data.

Table	Type	Contents
PRP	data	Personnel Reliability Program data.

This roster contains individuals who are entered into the Personnel Reliability Program. It contains important dates for required reading, tests and retests. It is maintained by the S2 shop. There is also a PRP report which prints out the roster.

Table	Type	Contents
QUALS	view	Contains those fields in the soldier record that relate to his qualifications

This is used mainly to generate the form for updating qualification data.

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents
RELIGION	data	Religious preference codes.

This table is used to translate the SIDPERS codes to the English description in
the SOLDIER table and to validate data entry to the SOLDIER table.

| SCTYSTATS | data | Contains the codes for security clearance investigation status. |

This table is used to translate from the SIDPERS codes to the description in the
SOLDIER table and to validate data entry to the SOLDIER table.

| SEPRATS | data | Temporary table used in "canned query" for separate rations. |

| SERVICE | view | Contains those fields in the soldier record that relate to the service as a whole. |

This was used to generate the form for updating serv_ce data.

| SIDPERS | data | Contains all the fields exactly as they are on the SIDPERS SPF file. |

These are the fields as they originally come from SIDPERS. See SIDPERS.CPY to
get the format of the fields in the Ingres copy command. See SOLDIER.APN to see
how the SIDPERS table is copied into the SOLDIER table and see SOLDIER.RPL to
see how the SIDPERS codes are translated.

| SKILLINVTRY | data | Temporary table used by the report Skill_invtry. |

| SOLDIER | data | Individual soldier record. |

The record is divided into four categories of data: personal, qualifications,
unit data, and service data. There is a view defined for each.
For the fields that originated in SIDPERS, see SOLDIER.APN to see how they are
appended to SOLDIER from SIDPERS. See SOLDIER.RPL to see how the SIDPERS codes
are translated. The SOLDIER table is used in many places. In Personnel, it is
used in the battalion roster, skill inventory, unit manning, daily status and
individual soldier reports. It is used in the forms to validate name and social

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents

security number. It is also used in Training for scheduling MOS and Common skills and later scoring them. In Logistics, it is referenced to show the hand receipt holder.

SOLDIERDD	data	Dictionary for the fields in the SOLDIER table.

This is used in the HELP form under Assign New Soldier.

SONAMEX	index	Index on table "soldier".

SOPOSX	index	Index on position in the table "soldier".

SORTMPC	data	Assigns non-alpha sort code to Military Position Codes - O,W,E.

SOSSNX	index	Index on ssn for the table "soldier".

SPECIAL	data	Contains soldiers with special or derogatory conditions.

This table is confidential and should only be viewed by commanders, the S1, S2, and 1st sergeants. A special condition may make the soldier non-deployable such as court martials or Article 15's. The CONDITIONS table contains the allowable entries and their deployability status. The only place this table is used is in the unit_manning report to print deployability status.

STATCODES	data	Personnel status codes.

This table contains the codes used in the daily status report. It is used to validate daily status input and to produce the daily status report. It has the category and deployability for each status and its sort order in the report. It is also used to print deployability in the unit_manning report.

PERSONNEL APPLICATION TABLE DICTIONARY

Table	Type	Contents
STATSSNX	index	Index on ssn for the table "status".
STATUS	data	Daily status of each soldier.

This table is updated daily and contains the status of each individual soldier.
If a soldier is present for duty, he has a status of PDY, otherwise he is
absent from duty or absent from training. Currently this table contains all the
soldiers in the battalion. A row is appended each time a new soldier is
assigned. This is to make updating easier since the user can retrieve on a
partial name instead of spelling the name and ssn exactly right to append a
row. Eventually, this should be replaced by multi-table QBF with the retrieve
on the soldier table and an append or delete to the status table. The allowable
status codes are in STATCODES along with the deployability of the status. The
individual's status is used in the daily status report, the battalion or battery
roster, the unit_manning report and the individual training schedule summary.

| TRANSIENT | data | Codes for transient personnel used primarily by report Unit_manning. |

These are the position codes 9990 - 9994 which are not authorized positions.

| UMR | data | Temporary table used by report unit_manning. |

| UNITDATA | view | Contains those fields in the soldier record relating to his current unit. |

This was used to generate the form for updating unit data.

| UNITS | data | Unit names down to the section level |

Each unit is separately listed with an A,B,C in the 10 character unit field to
indicate which battery it belongs to.

4.5 REPORT DICTIONARY

PERSONNEL APPLICATION REPORT DICTIONARY

Report	Contents

BN_PERSONNEL A battery or battalion roster of individual soldiers sorted
              alphabetically.

This report uses the temporary table BNPERSONN created by the Equel procedure
BNUPD and the BATTERYCODES table. It takes UPC as a parameter via the form
BNFORM and also accepts * to mean the whole battalion. The rows are sorted by
battery and then name. Included in this report are duty status, driver's
license, mealcard number, separate rations, security clearance and date
assigned. At the end of each battery, total officers, warrant, enlisted, and
attached are printed.

DAILY_DETAIL Name and particulars for each soldier who is absent

This report uses the SOLDIER, STATUS, STATCODES, and BATTERYCODES tables. It
lists everyone who is not PDY in the STATUS table. The sort sequence is
determined by the artificial variables in the STATUS table, CATSEQ and STATSEQ,
which separate absent from training, from absent from duty, and sort the status
within category according to the Fort Lewis form.

DAILY_STATUS Totals by officer, warrant, or enlisted for absent status

This report uses the temporary table DAILYSTATUS to generate the front-side of
the Daily Personnel Status Report. It accepts UPC or * as a parameter. The
sort is on catseq, totbreak, statseq, and mpcseq. Catseq is the sequence letter
of the category of statuses. Totbreak is used to print the dashes for the
totals. Statseq is the sequence number of the status within the category and it
is used to print the status. Then without new lines, the mpcseq is used to
print the totals for each MPC — officer, warrant, and enlisted. Note that
nothing is printed for the detail portion of the report.

GTRPT   GT score report.

INDVDUMP   All the fields in the SOLDIER table for one individual.

This report was generated by RBF and then modified. It takes the soldier's name
as a parameter.

PERSONNEL APPLICATION REPORT DICTIONARY

Report   Contents
-----------   --

OMTOE   Authorized and required personnel positions in the TO&E.

This report is a straightforward listing of the OMTOE table. It is sorted by
UPC, paragraph, and position code. The parameter is UPC and it also accepts *
for the whole battalion.

PRP   Personnel Reliability Program participants.

This report is a simple listing of the PRP table. It accepts UPC or * as a
parameter via the PRPFORM form. Date fields are used internally and printed as
YY.MM.DD.

SKILL_INVTRY   Frequency count of required, authorized, and assigned by MOS and
                grade

This report uses the temporary table SKILLINVTRY produced by the procedure
SKILLUPD. The procedure prompts for the parameter of UPC or *. The sort is on
seqno, mos and grade. Seqno is used to print the dashes for the total line.
The MOS break is used to print the MOS. Then without new lines, the grade break
is used to print the quantities. Note that nothing is printed in the detail
portion of the report.

UNIT_MANNING   List of current personnel assignments for each authorized position
                in the TO&E

This report uses the temporary table UMR created by the procedure UNITUPD. It
accepts UPC or * as a parameter. Multiple assignments to the same position (for
example transients) cause the names to list with the position blanked out.
Totals are calculated by summing the artificial variables for authorized and
assigned officers, warrant, and enlisted. These fields contain a 1 if true, 0
otherwise.

4.6 PROCEDURE DICTIONARY

PERSONNEL APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
ADDSOLDIER	ADDSOLDIE.QF	ASSIGNED	Assigns a soldier by adding him to all appropriate tables.

Subroutine ADDSOLDIER - This routine calls APPENDSOL to imitate QBF in appending a row to the SOLDIER table. It uses the compiled form ASSIGNED. After the append to the SOLDIER table the fields are stored in the array ch_data. From ch_data, a row is then appended to the STATUS, TTPTQUAL, TTWEAPONQUAL, and DRIVERS tables. NOTE: if the form ASSIGNED is changed, then the subscripts in ch_data may also have to be changed. The main purpose of this routine is to keep these other tables filled with the whole battalion so that instead of appending, an update can be made using a partial match query.

BNPERSONN	BNPERSONN.QC		

BNPRT	BNPRT.QF		Prints the battalion or battery personnel roster.

Subroutine BNPRT - Calls PRTREPORT to print the battalion or battery roster from BNPERSONN.LIS.

BNUPD	BNUPD.QF		Creates the temporary table for the battalion or battery roster.

Subroutine BNUPD - The main purpose of this routine is to calculate the count of officers, warrant, and enlisted. At one time, an outer join was necessary to include DRIVERS and STATUS information, but those tables now have the whole battalion in them. When multi-table QBF is available, these tables may again be limited to only the soldiers with driver or status data. At that time, the outer join will again be necessary.

DAILYDETPRT	DAILYDETP.QF		Prints the detail list for the daily status report.

Subroutine DAILYDETPRT - Calls PRTREPORT to print the daily status detail from DAILYDET.LIS.

Procedure	Source File	Form	Contents
DAILYPRT	DAILYPRT.QF		Prints the Daily Status report

Subroutine DAILYPRT - Calls PRTREPORT to print the Daily Status report from DAILYSTAT.LIS.

Procedure	Source File	Form	Contents
DAILYSTAT	DAILYSTAT.QC		

Procedure	Source File	Form	Contents
DAILYSTATUPD	DAILYUPD.QF		Creates temporary table for the Daily Status report.

Subroutine DAILYSTATUPD - This routine creates the DAILYSTATUS table which contains a row for each status and MPC (Military Personnel Code) combination. Each status belongs to a category: STRENGTH, ABSENT FROM DUTY, ABSENT FROM TRAINING. A status of TOTAL is used to hold the totals for each category. The template for this table is loaded from DAILYRPT. Each user has his own version of DAILYSTATUS. This prevents lockouts and possible deadlocks. Contained in the template are artificial fields used to sort and create totals: catseq, totbreak, statseq, and mpcseq. First the strength is calculated from the SOLDIER table based on the attached and organic status. Then, the absent statuses are calculated by first updating upc and mpc in the STATUS table and counting by status and mpc. Present for duty = absent - strength. Present for training = PDY - absent from training + SD gains. Finally, the totals are calculated with the sum aggregate by category and mpc.

Procedure	Source File	Form	Contents
DELSOLDIER	DELSOLDIE.QF	DEPART	Deletes a soldier from all appropriate tables.

Subroutine DELSOLDIER - This routine is necessary to keep the database consistent. It imitates QBF by first displaying the DEPART form in query mode to get a name or partial name and then displaying the same form in update mode inside a retrieve loop. When the user chooses the menu item DELETE, then a flag is set and the loop is exited. If the user chooses END in either the query display or the update display, the loop is exited or bypassed and the flag target_found is not set. The deletes are executed at the end of the retrieve loop when the flag is set. The outside loop continues to the next query mode display until the user exits. The soldier is deleted from STATUS, DRIVERS, PRP, SPECIAL, LOHOLDER, SOLDIERSCORE and EVENTSCORE.

PERSONNEL APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
INDVPRT	INDVPRT.QF		Prints the Individual Soldier Record report.

Subroutine INDVPRT - Calls PRTREPORT to print the Individual Soldier Record from INDVDUMP.LIS.

Procedure	Source File	Form	Contents
MAILCALL	MAILCALL.QC		Spawns a process which invokes the Mail utility.
OMTOE	OMTOE.QC		Creates temporary table for report.
OMTOEPRT	OMTOEPRT.QF		Prints the Personnel portion of the MTOE.

Subroutine OMTOEPRT - Calls PRTREPORT to print MTOE report from OMTOE.LIS.

Procedure	Source File	Form	Contents
SKILLINV	SKILLINV.QC		Creates temporary table for report.
SKILLPRT	SKILLPRT.QF		Prints the Skill Inventory report.

Subroutine SKILLPRT - Calls PRTREPORT to print Skill Inventory report from SKILLINV.LIS.

Procedure	Source File	Form	Contents
SKILLUPD	SKILLUPD.QF		Builds temporary table for the Skill Inventory report.
UMRPRT	UMRPRT.QF		Prints the Unit Manning report.

Subroutine UMRPRT - Calls PRTREPORT to print Unit Manning report from UNITMAN.LIS.

Procedure	Source File	Form	Contents
UNITMANUPD	UNITUPD.QF		Builds temporary table for report.

Procedure	Source File	Form	Contents
UNITUPD	UNITUPD.QF		Creates the temporary table which is used for the Unit Manning report.

Subroutine UNITUPD - This routine creates the UMR table which is used for the Unit Manning report. First, it creates the UNITMAN temporary table which has all authorized or required positions in the OMTOE table. Transient positions from the TRANSIENTS table are appended. Then the UMR table is created by joining the SOLDIER table to UNITMAN. The MOD and LOCATE functions are used to put a 1 in the officer, warrant, or enlistéd columns if the grade contains an O, W, or E. Next, authorized but not assigned positions are appended to UMR by going back to the OMTOE table and retrieving positions which do not have corresponding soldiers. Next, duty status is replaced from the STATUS table and deployability is determined from the STATCODES table. The SPECIAL table is searched to find non-deployable personnel by using the CONDITIONS table.

4.7 SPECIAL OPERATIONS AND MAINTENANCE PROCEDURES

The tables need to be reorganized periodically so that performance will not degrade. Each table that is subject to updates has a modification procedure. The "mod file" has the name of the table with the extension of ".MOD". Permit files must also be maintained. The main ones for Personnel are SOLDIER.PMT and STATUS.PMT. These permits define who may retrieve, append, update or delete rows in the table and which rows they can access based on their UPC. When a new user is registered on the system, the permit files should be edited to add his permissions and then the permits should be included and executed. Examples of using MOD and PMT files are given in Sections 2.2.3.4 and 2.2.3.5.

4.7.1 Canned Queries

Canned queries are VMS command procedures which call the INGRES terminal monitor with a pre-written QUEL program. This is accomplished by using the VMS create command to create a temporary file of the QUEL program. The file is defined as the INIT_INGRES file which executes when INGRES is invoked. Usually the QUEL code contains a terminal read macro to get a parameter from the user. Currently, the personnel canned queries are DATELOSS, MOSGRADE, and MEALCARD. DATELOSS lists everyone who is expected to leave in the next N days where N is the parameter. MEALCARD lists everyone who is on separate rations and MOSGRADE gives a count of personnel by MOS or grade or both.

4.8 DEVELOPMENT NOTES

A special note should be made concerning changes to the Assign New Soldier form. The form is a compiled form called by the ADDSOLDIER procedure. It must be re-compiled and added to PERSLIB after each change. If a new field

is added or the sequence of fields is changed, ADDSOLDIER refers to the fields with an array reference that may also need changing.

SECTION 5

TRAINING APPLICATION

The design of the Training application is based upon the following scenario. Training events are scheduled on a continuous basis for the battalion as a whole, for units within the battalion, and for individuals within these units. A training event can focus on unit-level exercises, individual skills or a combination of both. When an event terminates, the units and/or individuals are scored on how well they performed. Based on these scores, further training may be indicated. Critical skills can also decay due to lack of practice and should also be considered. A new set of events can then be scheduled to address any problems noted. The availability of personnel and equipment must be considered when building a schedule.

Based on the scenario described above, the Training application must provide scheduling facilities which can draw upon the data managed primarily by the Personnel application to assemble units and soldiers for training. The Logistics application supplies information on the status of vehicles and equipment, although this connection is not a completely automated one. The application must also supply the means of storing and retrieving unit and individual scores. Finally, general reference data identifying the tasks assigned to the battalion and the individuals within it must be made available to schedulers so that events will include only valid tasks.

5.1 DESIGN PHILOSOPHY

The Training application requires assembly of large amounts of varying types of data into a single, controllable structure. It also requires coordination between different sets of users to avoid scheduling conflicts. To minimize the complexity of data entry and to handle the high volume of scores to be entered, several approaches are used.

Control and coordination are maintained both internally and externally by centering all activities around the schedule as embodied in the EVENT table. All tasks, personnel, units and scores associated with a training session are linked back to the original event in which they were scheduled. The unique event code generated by Training when an event is scheduled serves as the

primary access key.

In order to ease the process of assembling large amounts of data on a single screen, tablefields (windows) which allow scrolling independent of the rest of the screen, are used extensively to provide efficient access to the data. As much information as possible is included in these lists so that items can be selected from them by either placing an "X" next to them or positioning the cursor on top of them. This reduces the number of key strokes required to select data which saves time and reduces error.

Maximum use is made of built-in INGRES utilities and capabilities. Utilization of FORTRAN is restricted to providing some of the more complex menu control sequences. Manipulation of data is done almost entirely with EQUEL (Embedded QUEL) from FORTRAN. This keeps the number and complexity of FORTRAN data items to a minimum.

5.2 BLOCK DIAGRAM

A high-level view of the Training application and the portions of the database on which it is based is in Figure 5-1. The top third of the diagram illustrates the user interface used to manipulate the training schedule, unit training records (Unit Book) and individual training records (Job Book). In addition, the interface provides for maintenance of reference data which defines the missions and tasks in which both units and individuals must be proficient. The middle portion of the diagram identifies the major tables referenced by Training. The EVENT table provides background data applicable to any scheduled training event while the tables EVENTTASK, EVENTUNIT and EVENTSOLDIER supply specific details of a training event as needed. After an event is completed, scores can be entered through the training schedule – the preferred method – or via the unit or job books. The reference tables ARTEP, MISSION and TASK are fairly stable and contain data from standard training manuals. They are used not only as an aid to scheduling training events, but to provide accurate task titles in the various training reports as well. The bottom third of the diagram identifies those tables from the Personnel application which are most frequently referenced by Training. It also indicates which tables provide an indirect link to Logistics through Personnel.

Figure 5-1. TRAINING BLOCK DIAGRAM

```
User Interface                      +-----------+
                                    | TRAINING  |
                                    +-----------+
                                         |
        -----------------------------------------------------------------------
        |              |                  |                |               |
  +-----------+  +-----------+      +-----------+    +-----------+   +-----------+
  | REPORTS   |  | UNIT BOOK |      | SCHEDULING|    | JOB BOOK  |   | REFERENCE |
  +-----------+  +-----------+      +-----------+    +-----------+   +-----------+
        |      /|\          |             |                |               |
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        \|/         |             |                |               |
         .                               +-------+
  Database          |                    | EVENT |          |               |
  (Training)        |                    +-------+          |               |
                    |                        |
              ----------                -----------
              |        +-----------+ +-----------+ +-------------+           |
              |        | EVENTUNIT |-| EVENTTASK |-| EVENTSOLDIER|           |
              |        +-----------+ +-----------+ +-------------+           |
              |            |             |             |                     |
              |        +-----------+    /|\       +-------------+            |
              |_____ | UNITSCORE |    |         | SOLDIERSCORE|___        |
                        +-----------+    |         +-------------+           |
                                         |          | WEAPONQUAL |          |
                                    +-------+       +-------------+
                                    | TASK  |        | PTQUAL |             |
                                    +-------+ ---+   +--------+
                                    | MISSION |
                                    +---------+ +
                                      | ARTEP |<-------------------------
                                      +-------+
              /|\                              /|\        /|\
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  (Personnel)     |                              |          |
            +-------+                        +--------+ +--------+
            | UNITS |                        | STATUS | | SOLDIER|
            +-------+                        +--------+ +--------+
                .                                           .
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  (Logistics)   +-----------+                    +------------+
                | EQUIP TOE |                    | HANDRECIPT |
                +-----------+                    +------------+
```
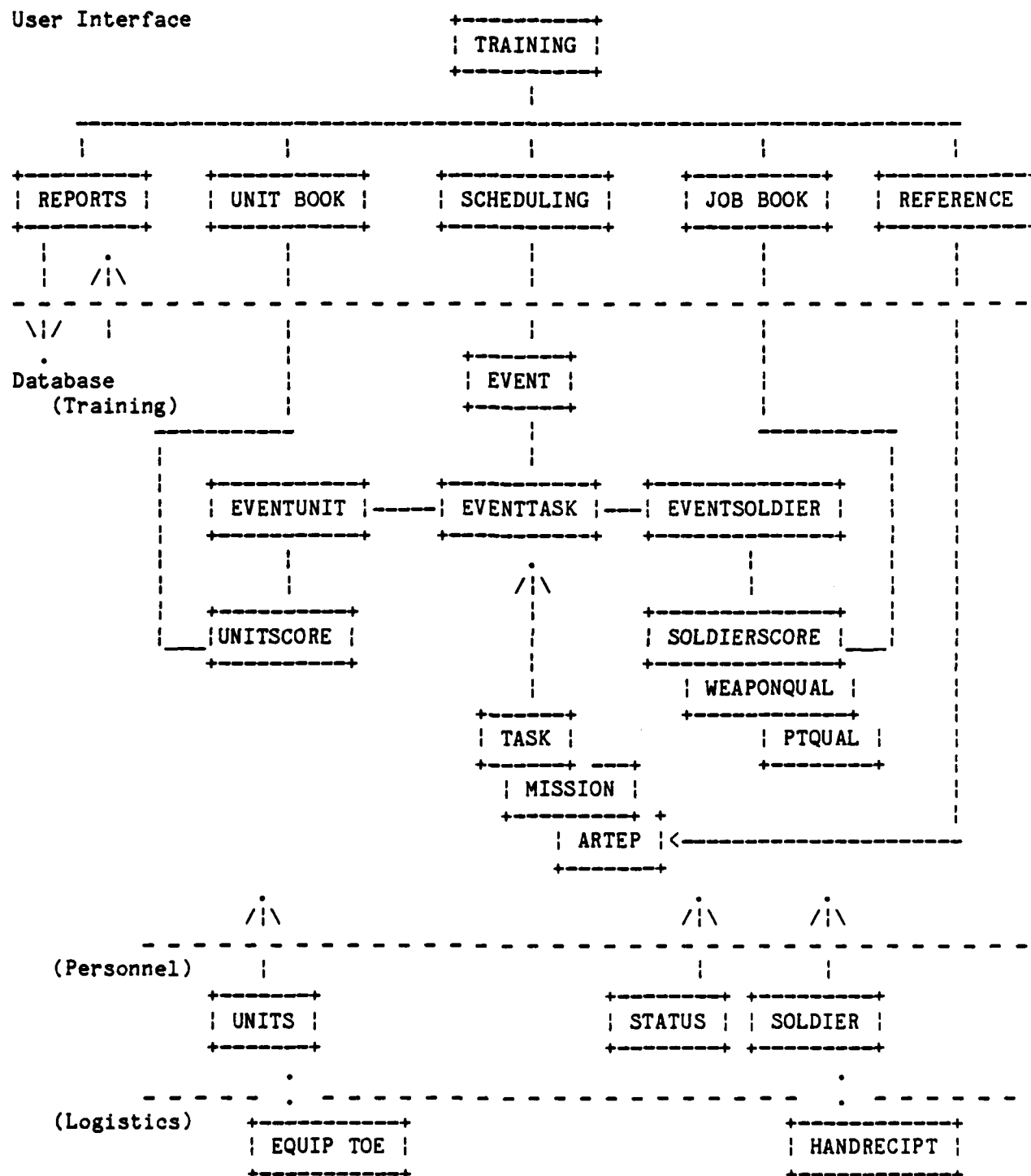
5.3 STRUCTURE DIAGRAM

The internal structure of the Training application is presented in in Figure 5-2 in terms of the frames (menus), FORTRAN procedures, and forms used to define it. The hierarchy of the flow of control is indicated by the indentation on the left.   For more information about any item in the figure, refer to the dictionaries in the sections which follow.

Figure 5-2. TRAINING APPLICATION STRUCTURE

Entity	Type	Comments
TRAINING	FRAME	Main Training menu.
HTRAINING	PROC	Display main help.
DEFINEEVENT	PROC	Build, modify event schedule.
TREVDEFINE	FORM	Permits scroll through schedule.
LOADEVENTLIST	PROC	Load schedule to screen.
GETARTEP	PROC	Select type of training (ARTEP).
TREVARTEP	FORM	Permits "X" of ARTEP code.
GETEVENTCODE	PROC	Generate unique event code.
GETSUBEVENT	PROC	Attach sub-event to main event.
ADDEVENT	PROC	Add event to schedule.
TREVENT	FORM	Permits entry of event header.
UNLOADEVENT	PROC	Unload form, write to table.
DELETEEVENT	PROC	Delete event from schedule.
UPDATEEVENT	PROC	Modify an event.
TREVENT	FORM	Permits editing of event header.
LOOKUPTASK	PROC	Select tasks to be trained.
TREVTASK	FORM	Permits "X" of tasks from list.
LOOKUPUNIT	PROC	Select units to be trained.
TREVUNIT	FORM	Permits "X" of units from list.
LOOKUPNAME	PROC	Select soldiers to be trained.
TREVSOLDIER	FORM	Permits "X" of soldiers to train.
UNLOADEVENT	PROC	Unload form, write to tables.
FINDEVENT	PROC	Search schedule for event.
LOADEVENTLIST	PROC	Load schedule to screen.
SCOREUNIT	PROC	Score units trained in event.
TRTASKBYUNIT	FORM	Permits entry of unit scores.
LOADUNITSCORE	PROC	Load unit scores to form.
UNLOADUNITSCORE	PROC	Unload unit scores, write to table.
SCORESOLDIER	PROC	Score soldiers trained in event.
TRTASKBYNAME	FORM	Permits entry of soldier scores.
INITSOLDSCORE	PROC	Load scores to form first time only.
LOADSOLDSCORE	PROC	Load soldier scores to form.
UNLOADSOLDSCORE	PROC	Unload soldier scores, write to table

Figure 5-2. TRAINING APPLICATION STRUCTURE (continued)

Entity	Type	Comments
UNITBOOK	PROC	View, modify unit scores.
TRUNITBOOK	FORM	Permits access to unit scores.
LOADUNITBOOK	PROC	Load unit scores to form.
UNLOADUNITBOOK	PROC	Unload screen, write to table.
TRSOLDRECORD	FRAME	Select JobBook, PT or Weapon Scores.
HTRSOLDREC	PROC	Display help message.
JOBBOOK	PROC	View, modify soldier scores.
TRJOBBOOK	FORM	Permits select, scroll of scores.
LOADJOB	PROC	Load scores to screen.
UNLOADJOB	PROC	Unload screen, write to table.
PTQUALV	FORM	QBF retrieve of PT scores.
TTPTQUAL	FORM	QBF update of PT scores.
TTWEAPONQUAL	FORM	QBF update of weapon scores.
TRREPORTS	FRAME	Main reports frame.
HTRREPORTS	PROC	Help display.
TRSCHEDREPS	FRAME	Training schedule reports.
HTRSCHEDREPS	PROC	Help display.
SCHEDULE	REPORT	Training schedule.
PRSCHEDRPT	PROC	Print the report.
SCHEDULE2	PROC	Builds temp. table for detail sched.
SCHEDULE2	REPORT	Detailed training schedule.
PRSCHED2	PROC	Print report.
INSTRUCTOR	REPORT	Instructor's schedule.
PRINSTRUCRPT	PROC	Print report.
EVENT	REPORT	Event summary report.
PREVENTRPT	PROC	Print report.
EVENTROSTER	REPORT	Event roster summary report.
PRROSTERSRPT	PROC	Print report.
MOSSHEET	REPORT	MOS score sheet report.
PRMOSSHTRPT	PROC	Print report.
UNITSHEET	REPORT	Unit score sheet report.
PRUNITSHTRPT	PROC	Print report.
TRUNITREPS	FRAME	Run unit reports.
HTRUNITREPS	PROC	Help.
UNITBOOK	REPORT	Unit scores report.
PRUNITBOOK	PROC	Print report.

Figure 5-2. TRAINING APPLICATION STRUCTURE (continued)

Entity	Type	Comments
TRMOSREPS	FRAME	Run MOS score reports.
HTRMOSREPS	PROC	Help.
MOSSCORE0	REPORT	BN level MOS score summary.
PRMOSBNRPT	PROC	Print report.
MOSSCORE1	REPORT	Battery level MOS score summary.
PRMOSBTYRPT	PROC	Print report.
MOSSCORE2	REPORT	SECTION level MOS score summary.
PRMOSSECRPT	PROC	Print report.
JOBBOOK	REPORT	Soldiers Job Book report.
PRJOBBOOKRPT	PROC	Print report.
PTQUAL	REPORT	PT qualification report.
PRPTQUALRPT	PROC	Print report.
WEAPONQUAL	REPORT	Weapons qualification report.
PRWEAPONQRPT	PROC	Print report.
TRREFERENCE	FRAME	Training reference data.
HTRREFERENCE	PROC	Help.
ARTEP	FORM	QBF form for access to ARTEP data.
MISSION	FORM	QBF form for access to Mission data.
TASK	FORM	QBF form for access to Task data.
TASKSUMMARY	REPORT	Summary of all tasks in database.
PRTASKSUMRPT	PROC	Print report.

5.4 TABLE DICTIONARY

TRAINING APPLICATION TABLE DICTIONARY

Table	Type	Contents
ARTEP	data	ARTEP codes and titles.

This table contains the titles and codes of ARTEPs. ARTEPs define the missions
and tasks which each unit is expected to perform. In order to generalize the
structuring of data in this data base, several non-standard ARTEPs have been
defined in addition to the usual ARTEPs which define collective training. These
are COMMON (Common Skills Training), MOS (MOS training) and REQUIRE (Required
Training such as PT). This table is fairly static and serves as the highest
level of training reference data in the data base. An ARTEP must be defined here
before it is entered into the Mission table or Task table.

EVENT	data	Time, location, subject and participants of scheduled training events.

The "event" table defines the time location and participants of training
events. This information is used to generate the training schedule reports. The
main storage key is the field "event" which contains a unique value generated by
the routines GETARTEP and GETEVENTCODE in the training application. Date is a
secondary key. Additional detail can be added to an event via the tables
"eventtask", "eventunit" and "eventsoldier". These also use "event" as their
main key. The scores and dates of tasks trained, as recorded in the tables
"unitscore" and soldierscore" can also be linked to the "event" table via an
"event" column in each of them. The main routines which manipulate this table are
DEFINEEVENT, ADDEVENT, UPDATEEVENT and DELETEEVENT.

EVENTSOLDIER	data	Identifies individual soldiers to be trained in a scheduled training event.

This table identifies the soldiers to be trained in a scheduled training event.
The main key is the field "event" which provides the link to the table "event".
The field "ssn" provides the link to the table "soldier" where name, grade and
MOS can be obtained. The soldier table provides, in turn, a link to the table
"omtoe" via the field "position". The "omtoe" table supplies information about a
soldier's unit.

EVENTSUMMARY	view	This view is used by report Event.

TRAINING APPLICATION TABLE DICTIONARY

Table	Type	Contents
EVENTTASK	data	This table identifies the tasks to be trained in a scheduled training event.

The table "eventtask" identifies the tasks to be trained in scheduled training event. Training events are defined in the table "event". Both tables are linked via the field "event". The fields "artep" and "task" are sufficient to uniquely identify a task to be trained as defined in the table "task". Note that in this table, as in the tables "task" and "mission", the field "mission" can contain an MOS. This supports the generalized structure used in this database of defining an ARTEP and mission for each task. See table "task" for details.

EVENTUNIT	data	This table identifies the units participating in a scheduled training event.

The table "eventunit" identifies the units participating in a scheduled training event as defined in the table "event". These tables can be linked via the field "event". Values for the field "unit" are drawn from the table "omtoe" where the structure of units are defined. Note that units need not be specified for every training event.

MISSION	data	Missions for which units must be trained.

A mission is an action which a unit within the battalion must be trained to perform. Each mission belongs to an ARTEP that defines an action which the battalion as a whole must perform. A mission is composed of a set of specific tasks that must be performed to acheive the mission's goals. This table provides the means of identifying and labeling each mission. Note that a mission cannot be added to this table until the ARTEP to which it belongs has been added to the table ARTEP. In keeping with the generalized structure of ARTEP-Mission-Task used in collective training, missions are equivalent to MOSs for the ARTEPs "MOS" and "COMMON" used in individual training. See tables "artep" and "task" for more details.

MOSSCORE	view	This view is used by the MOS score reports.

TRAINING APPLICATION TABLE DICTIONARY

Table	Type	Contents
MOSSCORE2	view	View used by report Mosscore2.
PTQUALV	view	View of table TTPTQUAL which automatically calculates pass/fail using score data.
SCHEDULE2	data	Temporary table used by report Schedule2, the detailed training schedule.
SCHEDULER	data	Initials of training event scheduler and count of events scheduled.

This table is used to store a count of the number of events scheduled by an individual scheduler. From this data, a unique code for each event scheduled can be created by combining the schedulers's initials with the sequence number. This table is manipulated by the Equel procedure GETEVENTCODE in the Training application. The unique code generated is used to link the tables "event", "eventunit", "eventsoldier" and "eventtask" all of which combine to define a training event to whatever level of detail is required.

SOLDIERSCORE data   Common skills and MOS training scores.

The scores and dates of common skills and MOS training events are stored here. The major access keys are SSN, date and event code. Scores, or status codes, are P for Pass, F for Fail and N for Not Evaluated. Note that a score can be entered for each evaluation of a task. By saving the previous scores in this manner, trends in training status can be determined.

TASK   data   Code and title of all tasks, collective and individual.

The code numbers of all tasks, collective and individual, are stored in this table to provide an accurate reference from which a trainer can select tasks to train. Each task belongs to a general category of related tasks that combine to form a mission. Each mission in turn belongs to a general category of related missions which combine to form an ARTEP. The hierarchy of this data structure is therefore ARTEP-Mission-Task. While this is the traditional hierarchy employed

Table	Type	Contents

to handle collective training, it has been extended and generalized in this data base to include individual training by creating the ARTEPs COMMON and MOS to handle thses types of training.

TASKSUMMARY	view	View used by report Tasksummary.
TTPTQUAL	data	PT qualification data.
TTWEAPONQUAL	data	Weapons qualification data.
UNITSCORE	data	Scores of collective task training.

This table contains the scores and dates of unit training events. The score, or status codes are TR for trained, NE for not evaluated and NP for needs practice. These codes appear in the Status column of the Detailed Training Schedule report. Note that a unit can also be evaluated as a whole for its performance in MOS or Common Skills training in addition to ARTEP task training. The Unitscore reports can be used to produce various summaries of this data.

XARTEPARTEP	index	Index on table "artep".
XEVENT1	index	Index on table "event".
XEVSOLD1	index	Index on table "eventsoldier".
XEVTASK1	index	Index on table "eventtask".

TRAINING APPLICATION TABLE DICTIONARY

Table	Type	Contents
XEVUNIT1	index	Index on table "eventunit".
XSOSCORE1	index	Index on table "soldierscore".
XSOSCORE2	index	Index on table SOLDIERSCORE.
XSOSCORE3	index	Index on table "soldierscore".
XTASK1	index	Index on table "task".
XUNSCORE1	index	Index on table "unitscore".
XUNSCORE2	index	Index on table "unitscore".

5.5 REPORT DICTIONARY

TRAINING APPLICATION REPORT DICTIONARY

Report	Contents

EVENT   Detailed description of a training event including tasks to train.

The Event report provides a concise summary of a training event by combining
data from the tables "event" and "eventtask" to produce a description of the
event followed by a list of the tasks to be trained in the event. It can be
issued to an instructor as an aid to planning an event. It can be used in
conjunction with the report Event Roster which provides a list of all soldiers
scheduled to participate in an event.

EVENTROSTER   Roster of soldiers scheduled to participate in a training event.

The Event Roster report combines data from the tables "event", "eventsoldier"
and "status" to produce a description of a training event followed by the names
of all soldiers scheduled to participate in the event along with their current
duty status. If run the day of the event, it will indicate who is unavailable
for training and why (Hospital, Guard Duty, CQ, etc).

INSTRUCTOR   Training schedule sorted by instructor.

The Instructor report is identical to the Schedule report except that the
Instructor column is displayed on the left and serves as the major sort key.
With this format, a schedule for each instructor can be generated. This report is
based soley on the table "event".

JOBBOOK   Soldier's Job Book.

The Job Book report uses data from the table "soldierscore" to generate a Job
Book style listing for an individual soldier or set of soldiers. All MOS and
Common skills tasks trained can be reported in this way.

MOSSCORE0   MOS/Common Skills score summary for the entire battalion.

The Mosscore0 report is the first in a series of reports that provide summaries
of MOS and Common Skills scores. This report operates at the battalion level
while the others provide breakdowns of the numbers at the battery and section
level. Using data from the table "soldierscore", the total number of passes,
fails and not-evaluateds are counted for each task of the associated with the
MOSs specified. It is possible, for example, to request these figures for all
13B10 tasks. For task number XYZ-123-ABCD you might see that 300 soldiers passed
it, 200 failed it and 100 were not evaluated. Task XYZ-123-EFGH would very
likely return a different set of numbers. The numbers can then be used as an
aid in evaluating the effectiveness of the training and as indicators of areas

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Report	Contents

requiring further attention.

MOSSCORE1   MOS/Common Skills score summary by battery.

The report Mosscore1 is identical to report Mosscore0 except that the counts of passes, fails and not-evaluateds for the tasks in question are calculated by battery instead of for the whole battalion. See report Mosscore0 for more details.

MOSSCORE2   MOS/Common Skills score summary by section.

The report Mosscore2 is identical to reports Mosscore0 and Mosscore1 except that the counts of passes, fails and not-evaluateds for the tasks in question are calculated by section instead of by battalion or battery. See report Mosscore0 for details.

MOSSHEET   MOS/Common Skills training score sheet.

The Mossheet report combines data from the tables "event", "eventtask" and "eventsoldier" to produce a score sheet suitable for recording the score each trainee achieves for each task in a specified event. The score sheets can be filled in by the trainer and then be returned to the training NCO for entry of the scores into the data base.

PTQUALV   PT Qualification scores with automatic calculation of Pass/Fail.

SCHEDULE   Battalion training schedule.

The Schedule report produces a training schedule for the dates and battery specified using the "event" table.

SCHEDULE2   Detailed training schedule.

The Schedule2 report is very similar to the Schedule report except that any units and tasks scheduled for a training event will be shown as well. This report is based on the temporary table "schedule2" which must be regenerated each time the report is run by the Equel procedure SCHEDULE2.

TRAINING APPLICATION REPORT DICTIONARY

Report	Contents

SOLDIERSCORE   MOS and Common skills training scores.

TASKSUMMARY   Summary listing of all ARTEPs, Missions and Tasks stored in the
              data base.

The Task Summary report lists all the ARTEPs, Missions and Tasks stored in the
database. It consists of a combined listing of the tables "artep", "mission" and
"task" sorted in that order. It can be used as a reference when selecting tasks
for an event or when verifying the entry of tasks into the data base.

UNITBOOK   Unit training scores in a job book format.

The Unitbook report produces a job book style listing of the specified unit(s)
training scores. It is based primarily on the table "unitscore".

UNITSCORE   Summary of unit training scores across the entire battalion.

The Unitscore report summarizes unit training scores across the whole battalion.
The number of Trained, Not Trained, Need Practice and Not Evaluated scores are
counted for each unit trained in the tasks in question.

UNITSHEET   Unit training score sheet.

The Unitsheet report combines data from the tables "event", "eventunit" and
"eventtask" to produce a scoresheet suitable for recording the score each unit
receives for each task in a specified event. The score sheets can be filled in
by the trainer and then returned to the training NCO for entry of the scores
into the data base.

5.6 PROCEDURE DICTIONARY

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
ADDEVENT	ADDEVENT.QF	TRADDEVENT	Add a new event to the training schedule.

This procedure is called by procedure DEFINEEVENT. It displays the form Trevent and accepts data in fill mode. When, all data has been entered, the data from the form is written to table Event. The user is then asked if detailed data is to be added. If so, procedure UPDATEEVENT is called. Control is then returned to procedure DEFINEEVENT.

Procedure	Source File	Form	Contents
DEFINEEVENT	DEFINEEVE.QF	TREVDEFINE	Define a training event. Create a new one or add detail to an existing one.

This procedure is called directly from the OSL code for frame Training. When invoked, it displays, in read only mode, the current day's schedule in a tablefield. Various menu commands are provided for Adding, Deleting, Finding and Updating events in the schedule. Except for the Add and Find commands, all functions operate on the event on which the cursor is placed. By providing these functions, it serves as the central control point for working with the schedule.

Procedure	Source File	Form	Contents
DELETEEVENT	DELETEEVE.QF		Delete a training event from all training event tables.

The training event specified is deleted from the tables Event, Eventunit, Eventtask and Eventsoldier. This routine is called from DEFINEEVENT and consists of standard QUEL delete statements.

Procedure	Source File	Form	Contents
FINDEVENT	FINDEVENT.QF		Find and display the event(s) specified.

This routine is called from DEFINEEVENT to fill the window displayed there only with the training schedule subset that the user wants. The user is prompted for a series of values that are used to build a where-clause for a QUEL retrieve statement. This where-clause is passed to the routine LOADEVENTLIST which actually retrieves the training schedule from the Event table and loads the data into a tablefield.

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
FINDNAME	FINDNAME.QF		Find the name specified in a tablefield with a column called "name".

This routine prompts the user for a name to search for in any tablefield with a column called "name" and attempts to find a match in the tablefield. It is assumed that the calling routine has already loaded the tablefield with data. The form name and tablefield name must be specified by the calling routine. Wild card searches are permitted.

Procedure	Source File	Form	Contents
GETARTEP	GETARTEP.QF	TREVARTEP	Prompts user for ARTEP code of training event.

This routine displays a form with a tablefield of all possible ARTEP codes. The user selects the appropriate ARTEP code by typing an "X" next to it. After an ARTEP is selected the routine GETEVENTCODE is called to generate the actual event code, a combination of the ARTEP code, the user's initials and a sequence number.

Procedure	Source File	Form	Contents
GETEVENTCODE	GETEVENTC.QF		Generates a unique event code for each training event.

This routine is called by the routine GETARTEP to generate training event code from a combination of the type of ARTEP selected by the user, the user's initials and a sequence counter maintained for that user. The sequence counter is maintained in the table Scheduler. For example, if John J. Doe schedules an MOS training event as the 117th event he has created, the code would be MOS:JJD-117.

Procedure	Source File	Form	Contents
GETSUBEVENT	GETSUBEVE.QF		Creates unique code for training schedule sub-events.

The routine DEFINEEVENT allows a user to attach a sub-event to a main event in the training schedule. This routine generates the unique code that connects the sub-event to its parent. This is done by adding a letter to the end of the parent event's event code. The first sub-event attached to MOS:JJD-117 would be MOS:JJD-117A, the second MOS:JJD-117B etc. Sub-events are used to allow smaller units to specify details about their activities when participating in a training event as a component of a larger unit.

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
HTRAINING	HTRAINING.QF		Displays the help file for the main Training form.
HTRMOSREPS	HTRMOSREP.QF		Displays the help file for the frame Trmosreps (MOS Reports).
HTRREFERENCE	HTRREFERE.QF		Displays the help file for the frame Trreference (Reference data).
HTRREPORTS	HTRREPORT.QF		Displays the help file for the frame Trreports (Training Reports).
HTRSCHEDREPS	HTRSCHEDR.QF		Displays the help file for the form Trschedreps (Training Schedule Reports).
HTRSOLDREC	HTRSOLDRE.QF		Displays the help file for the frame Trsoldrecord (Soldier Records).
HTRUNITREPS	HTRUNITRE.QF		Displays the help file for the frame Trunitreps (Unit Training Reports).
JOBBOOK	JOBBOOK.QF	TRJOBBOOK	Provides access to a soldier's training records in a job book format.

This routine lets the user add, delete and search for individual soldier training records for MOS and Common Skills tasks. Two tablefields are used. The first can be loaded with a set of names. The second can be loaded with the

Procedure	Source File	Form	Contents

scores for the soldier whose name appears in the first window. This routine is intended to be used primarily for viewing records and making minor changes. Large scale loading of records should be done with the routine SCORESOLDIER which is called from DEFINEEVENT.

| LOADEVENT | LOADEVENT.QF | TREVENT | Load the details of a training event - Units, Tasks and names into table fields. |

This routine is called by UPDATEEVENT to load detailed information about an event into three tablefields. This information includes units, tasks and names and is drawn from the tables Eventunit, Eventtask and Eventsoldier. This data supplements the background information provided for an event in the table Event and is required in order to record training scores for units and individuals. The user can scroll through the three tablefields to get a complete picture of the event.

| LOADJOB | LOADJOB.QF | TRJOBBOOK | Loads the tasks and scores (if any) into the job book form. |

This routine is called by JOBBOOK to load a set of tasks and scores into a tablefield in the form Trjobbook for an individual soldier. The tasks loaded are determined by the SSN, MOS and date specified by the calling routine. The data can then be manipulated by the user when control returns to JOBBOOK.

| LOADNAMELIST | LOADNAMEL.QF | | Load a tablefield with UPC, name and MOS data. |

This routine prompts the user for the UPC, name or MOS of a soldier and fills the specified tablefield of the specified form with that information. It is a general purpose routine that can be used to load any tablefield containing these variables.

| LOOKUPNAME | LOOKUPNAM.QF | | Helps the user look up the names of the soldiers to be added to a training event. |

This routine is called by UPDATEEVENT to allow the user to select names for inclusion in a training event by checking them off a list. In this way the user does not have to know SSNs for the men he is scheduling for training.

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
LOOKUPTASK	LOOKUPTAS.QF	TREVTASK	Assists the user in selecting tasks to be trained in an event.

This routine is called by UPDATEEVENT to help the user select the tasks to include in a training event. Tasks are selected by checking them off a list presented in a tablefield. This frees the user from having to remember specific task numbers. The form used is loaded from the tables Mission and Task and the data selected is transferred to the tablefield Tasklist in the form Trevent. See UPDATEEVENT for more details.

LOOKUPUNIT	LOOKUPUNI.QF		Assist user in selecting units to schedule for a training event.

This routine is called by UPDATEEVENT to assist a user in adding units to a training event. A list of unit names is displayed in a tablefield; the user can select from this list by placing an "X" next to the appropriate units. This releases the user from needing to remember unit names.

PREVENTRPT	PREVENTRP.QF		Prints the Event report.
PRINSTRUCRPT	PRINSTRUC.QF		Prints the Instructor report.
PRJOBBOOKRPT	PRJOBBOOK.QF		Prints the Job Book report.
PRMOSBNPRT	PRMOSBNPR.QF		Prints the MOS BN scores report.
PRMOSBNRPT	PRMOSBNRP.QF		Prints the MOS BN scores report.

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
PRMOSBTYRPT	PRMOSBTYR.QF		Prints the MOS battery scores report.
PRMOSSECRPT	PRMOSSECR.QF		Prints the MOS section scores report.
PRMOSSHTRPT	PRMOSSHTR.QF		Prints the MOS score sheet report.
PRPTQUALRPT	PRPTQUALR.QF		Prints the PT Qual report.
PRROSTERRPT	PRROSTERR.QF		Prints the training event roster report.
PRSCHED2RPT	PRSCHED2R.QF		Prints the detailed training schedule, Schedule2.
PRSCHEDRPT	PRSCHEDRP.QF		Prints the training schedule report.
PRTASKSUMRPT	PRTASKSUM.QF		Prints the Task Summary report.
PRUNITBOOK	PRUNITBOO.QF		Prints the unit score book report.

TRAINING APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
PRUNITSHTRPT	PRUNITSHT.QF		Prints the units score sheet report.
SCHEDULE2	SCHEDULE2.QF		Builds the temporary table Schedule2 used by the report of the same name.

The report Schedule2 is identical to the regular Schedule report except that
more detail is included. The specific tasks to be trained are identified by
number and title along with unit scores for each task if available. To overcome
some formatting limitations which prevent the INGRES Report Writer from handling
this directly, it is necessary to build a temporary copy of the schedule table
with the task number and title information embedded in the regular description
field. In this way the regular Schedule report can handle the details with
little modification. This routine is called directly from the OSL code for the
frame Trschedreps.

SCORESOLDIER	SCORESOLD.QF		Saves soldiers' training scores by moving them from tablefield to the data base.

This procedure is called by UPDATEEVENT to build a score sheet of all tasks
assigned to an event for each soldier assigned to it. When the data entry is
completed, the scores are moved from the tablefield in which they were loaded
into the data base.

SCOREUNIT	SCOREUNIT.QF		Allows user to enter training scores for units.

This routine is called by DEFINEEVENT to allow a user to build a score sheet for
each unit assigned to an event. When data entry is complete, the scores are
moved to the table "unitscore".

TREVENTRPT	TREVENTRP.QF		Prints the training event report.
UNITBOOK	UNITBOOK.QF	TRUNITBOOK	Provides access to unit training scores in a job book format.

This routine provides access to the data in the table Unitscore for simple
viewing, update or deletion. Data are presented using an EQUEL/FORMS tablefield

Procedure	Source File	Form	Contents

to permit the user to scroll through as much data as desired. All operations on the data are controlled via a standard EQUEL/FORMS menu which contains the commands Find (searches the tablefield), Update (changes values in the tablefield only), Delete (removes a row) and End (allows user to exit the screen and writes out any changes to the table Unitscore. Two subroutines defined in the same source file - LOADUNITBOOK and UNLOADUNITBOOK - are used to manage the tablefield. This routine is called directly from the ABF frame Trunitscore.

Procedure	Source File	Form	Contents
UNLOADEVENT	UNLOADEVE.QF		Unloads detailed event data and saves it in the data base.

This routine is called by UPDATEEVENT to save any updates to detailed event data from the Unit, Task and Name tablefields. Data is either appended to or replaced in the tables Eventunit, Eventtask and Eventsoldier.

Procedure	Source File	Form	Contents
UNLOADJOB	UNLOADJOB.QF	TRJOBBOOK	Unload the form Trjobbook and record any changes in the data base.

This routine is called by the routine JOBBOOK whenever it exits to check for any updates that may have been made while JOBBOOK was active. Using standard EQUEL/Fortran, the tablefield Tasklist is unloaded and the "hidden" tablefield columns _State(supplied by EQUEL) and _State2 (supplied by JOBBOOK) indicate the type of database update which must be performed, if any. The appropriate QUEL command - append, replace or delete - is then executed to modify the table Soldierscore.

Procedure	Source File	Form	Contents
UPDATEEVENT	UPDATEEVE.QF		Allows the user to edit a training event.

This routine allows the user to update a training event by editing the header information found in the table Event or by editing detailed information in the tables Eventunit, Eventtask, Eventsoldier via the routines LOOKUPUNIT, LOOKUPTASK and LOOKUPNAME. It is called from DEFINEEVENT.

5.7 SPECIAL OPERATIONS AND MAINTENANCE PROCEDURES

INGRES tables must be periodically restructured to prevent updates and deletions from causing perfomance degradations. The ".MOD" files in the [ATUTMS.TRAINING] directory contain the necessary QUEL modify commands. They should be executed once a month or more often if performance degrades. The Event and Soldierscore tables should be watched closely due to their size and volatility. An example of using a ".MOD" file is given in Section 2.2.3.4.

Access to INGRES tables is controlled by the permit statements contained in the ".PMT" files in the directory [ATUTMS.TRAINING]. Training

requires relativly few permits since most of the sensitive data it deals with are already restricted by permits on the Soldier table. These permits are maintained via permit files in the Personnel application. The permits on the Event table are designed to allow everyone to view the table, yet let only the event scheduler perform updates or deletions.

5.8 DEVELOPMENT NOTES

Due to the relative complexity of its user interface, Training makes much greater use of EQUEL/FORTRAN than do the other applications. Utility routines which make programming in the EQUEL environment much easier are used extensively. These routines usually have the word "FORM" embedded in their names (i.e., MSGFORM, ADDFORM, PUT_FORM, etc.) and are documented in the Utilities application.

Training also uses compiled forms to improve performance. Forms are compiled via the VIFRED catalog menu and then inserted into the library TRAINFORM.OLB via the command procedure COMPFORM.COM. Once in the library file, they are available for linking as discussed in Section 2.2.4.1, Linking Applications.

SECTION 6

LOGISTICS APPLICATION

The Logistics application is designed to allow batallion personnel to keep track of the status of each piece of equipment maintained by the batallion. This includes such things as trucks, jeeps, howitzers, rifles, tents and other equipment necessary to fight a war. The database contains some relatively stable information such as the description, model number, and serial number of each piece of equipment. This information only changes every few months. Also included in the database are highly volatile data such as the current operational status of certain pieces of equipment (vehicles and howitzers), which soldier is currently responsible for each piece of equipment, and service schedules and repair history of each piece of equipment. This data is updated daily by the batallion personnel. Other volatile areas are the Prescribed Load List, and the Document Register. Data is kept here concerning the quantity on hand and re-order status of spare parts. The logistics portion of ATUTMS is also capable of providing printed reports containing current information from the aforementioned areas. Often used reports are those such as the Document Register report, the 2406 Form reports (vehicle status, the Hand Receipt reports (who is responsible for each piece of equipment, and the PLL reports (current status of spare parts).

6.1 BLOCK DIAGRAM

A high-level view of the Logistics application is presented Figure 6-1. The top third of the diagram illustrates the user interface used to maintain logistics data and generate reports about it. The middle third of the diagram shows the major logistics tables which contain data on hand receipts, repairs, the document register and the Prescribed Load List. The bottom third shows the Personnel tables to which Logistics has the strongest connections.

Figure 6-1. LOGISTICS BLOCK DIAGRAM

User Interface

```
                                    +-------------+
                                    |  LOGISTICS  |
                                    +-------------+
                                          |
         -------------------------------------------------------------------
         |              |                 |              |              |
  +-------------+ +-------------+ +-----------------+ +--------------+ +-------+
  |   REPORTS   | |   PROPERTY  | |  SERVICE/REPAIR | | DOC REGISTER | |  PLL  |
  +-------------+ +-------------+ +-----------------+ +--------------+ +-------+
         |              |                 |                 |             |
         |    /|\       |                 |                 |             |
    - - -\|/- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
          .           |                 |                 |             |
Database            +---------------+   |                 |             |
   (Logistics)      |  HANDRECEIPT  |   |                 |             |
                    +---------------+   |                 |             |
                     |  |      |     |  |                 |             |
                 +--------+ |  |  +--------------+ +------------------+ +-------+
                 |  NSN   | |  |  |    REPAIR    |-----| DOCREGISTER  |------| PLL |
                 +--------+ |  |  +--------------+ +------------------+ +-------+
               +---------------+|  |  SERVICE   |
               |   EQUIP TOE   ||  +------------+
               +---------------+|
                               |
                        +-----------+
                        |  HOLDER   |
                        +-----------+

                      /|\      /|\      /|\
                       |        |        |
    (Personnel)  - - - |- - - - |- - - - |- - - - - - - - - - - - - - - - - -
                       |        |        |
                  +---------+ +---------+ +---------+
                  |  UNITS  | | SOLDIER | | DRIVER  |
                  +---------+ +---------+ +---------+
```
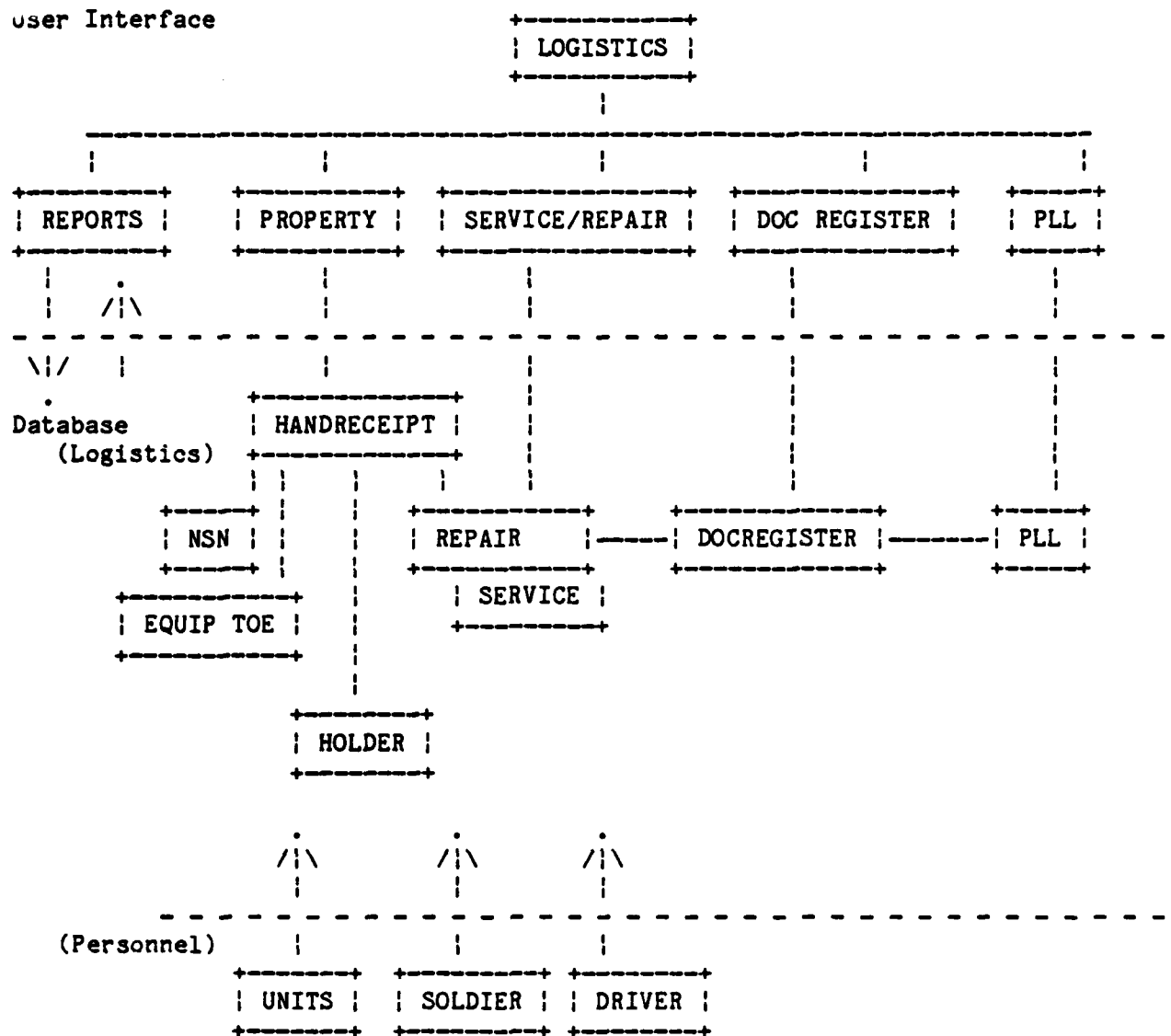
6.2 STRUCTURE DIAGRAM

The internal structure of the Logistics application is presented in Figure 6-2 terms of the frames(menus), FORTRAN procedures and forms used to define it. The hierarchy of the flow of control is indicated by the indentation on the left. For more information about any item shown below, refer to the dictionaries in the sections which follow.

Figure 6-2. LOGISTICS APPLICATION STRUCTURE DIAGRAM

Entity	Type	Comments
LOGMENU	FRAME	Logistics main menu
HLOGMENU	PROC	Displays help information.
LODOCUPD	FRAME	Document register menu.
HLODOCUPD	PROC	Help for Doc Reg update.
LOADDDOC	FORM	Add to document register.
LOMODDOC	FORM	Update document register.
LOLOOKDOC	FORM	Retrieve document register.
LODOCREG	REPORT	Run document register report.
LOPRTDOC	PROC	Print document register report.
LOMAINTMENU	FRAME	Service and repair menu.
HLOSERVMENU	PROC	Help.
LOSERVFORM	FORM	Enter service update.
LOREPFORM	FORM	Enter repair update.
LOSERVREP	REPORT	Run service due report.
LOPRTSERV	PROC	Print service due report.
LOREPREP	REPORT	Run repair history report.
LOPRTREP	PROC	Print repair history report.
LO2406B	PROC	Generate 2406 backside temporary table.
BACK_2406	REPORT	Run 2406 backside report.
LOPRT2406	PROC	Print 2406 backside report.
LO2406F	PROC	Generate 2406 frontside temporary table.
LO2406F	REPORT	Run 2406 frontside report.
LOPRT240F	PROC	Print 2406 frontside report.

Figure 6-2. LOGISTICS APPLICATION STRUCTURE DIAGRAM (continued)

Entity	Type	Comments
LOPARTSMENU	FRAME	Prescribed load list menu.
HLOPLLMENU	PROC	Help.
LOADDPLL	FORM	Add to pll.
LOMODPLL	FORM	Update pll.
LOLOOKPLL	FORM	Retrieve pll.
LOPLLUPD	PROC	Generate battery pll temporary table.
LOPLLREP	REPORT	Run battery pll report.
LOPRTPLL	PROC	Print battery pll report.
LOBNPLLUPD	PROC	Generate battalion pll temporary table.
LOBNPLLREP	REPORT	Run battalion pll report.
LOPRTBNPLL	PROC	Print battalion pll report.
LOPLLDESC	FORM	Pll description update.
LOPROPMENU	FRAME	Property menu.
HLOPROPMENU	PROC	Help.
LOHANDMENU	FRAME	Hand receipts menu.
HLOHANDMENU	PROC	Help.
LOHANDADD	FORM	Add hand receipts.
LOHANDRET	FORM	Look at hand receipts.
LOHANDUPD	FORM	Update hand receipts.
LOCOMP	FORM	Components data update.
LOHOLDUPD	FORM	Hand receipt holder update.
LOHANDREP	REPORT	Run hand receipt forms report (parent ite
LOPRTHAND	PROC	Print hand receipt forms (parent items).
LOHRCO	PROC	Generate hand receipt forms (components).
LOHRCO	REPORT	Run hand receipt forms report (components
LOPRTHRCO	PROC	Print hand receipt forms (components).
LOPHAND	PROC	Generate hand receipt temporary table.
LOPHAND	REPORT	Run hand receipt report.
LOPHANDPR	PROC	Print hand receipt report.
LOROLLMENU	FRAME	Rollup menu.
HLOROLLMENU	PROC	Help.
LOPSTAT	PROC	Generate status temporary table.
LOPSTAT	REPORT	Run status report.
LOPRTSTAT	PROC	Print property status report.
LOBNROLL	PROC	Generate batallion rollup temporary table
LOBNROLL	REPORT	Run batallion property rollup.
LOPRTROLL	PROC	Print batallion property rollup.
LOEMTOREP	REPORT	Run table of equipment report.
LOPRTEMTO	PROC	Print table of equipment report.
LOLINE	FORM	Line item update.
LONSN	FORM	NSN table update.

6.3 TABLE DICTIONARY

LOGISTICS APPLICATION TABLE DICTIONARY

Table	Type	Contents
B2MAGJ	data	Contents of original tapes from DLOGS.
E3WAGJ	data	Contains data from original DLOGS tapes.
EMTOE	data	Equipment portion of MTOE.

Used mostly to get the quantity authorized by unit (sub-section of a battery).

Table	Type	Contents
G3WAGJ	data	Contains data fromm original DLOGS tapes.
HANDRPT	data	Temporary table used to generate Hand Receipt report.
HOLDRPARAX	index	Index on table "loholder".
LOBNPLLRPT	data	Temporary table created for report "lobnpllrep".
LOCOMP	data	logistics property components.

This table contains information about hand receipt components. An example would be a tool box. A tool box has a stock number, but each part (the case, and each tool) has its own stock number. This table is used in conjunction with the LOHAND table to generate hand receipt forms.

Table	Type	Contents
LODOCREG	data	Logistics document register.

This is a stand-alone table that contains all the information necessary to keep track of parts that have been ordered.

LOGISTICS APPLICATION TABLE DICTIONARY

Table	Type	Contents
LOEXCESSPART	data	Logistics excess parts.

This table contains information needed to keep track of excess parts. When parts are found to be in excess of the authorized quantity, they are not returned to the supply depot, but are kept for a short time in case they may be needed by another battery. This table can be used to match against the lohand, LOPLL, and LODOCREG tables to determine where parts are needed.

LOHAND	data	Logistics hand receipt information.

This table contains information about each item that is 'owned' by each soldier. It is used in conjunction with the LOHOLDER and LOCOMP tables to generate hand receipts.

LOHANDRET	view	View of lohand with soldier name and item description included.

LOHOLDER	data	Logistics hand receipt holders.

This table contains information about each holder of a hand receipt. It is used in conjunction witht the LOHAND and LOCOMP tables to generate hand receipts.

LOLINE	data	Logistics line items.

This table contains information about each line item number.

LONSN	data	Logistics stock number information.

This table contains information about each kind of item by stock number.

LOPLL	data	Logistics Prescribed Load List.

This table contains information about each type of spare part that is on the Prescribed Load List.

LOPLLDESC	data	Logistics Prescribed Load List descriptions.

This table contains the description of each item in the Prescribed Load List.

LOGISTICS APPLICATION TABLE DICTIONARY

Table	Type	Contents
LOPLLRPT	data	Temporary table created for report "lopllrep".
LOREPAIR	data	Logistics vehicle repair history

This table contains information about the repair history of each major end item.

Table	Type	Contents
LOSERVICE	data	Logistics vehicle service schedules

This table contains information about the service schedule for each major end item.

Table	Type	Contents
T2406B	data	Temporary table containing data for the 2406 backside report.
T2406F	data	Temporary table created for report "lo2406f".
TBNROLL	data	Temporary table created for report "lobnroll".
TLOPHAND	data	Temporary table created for report "lophand".
TLOPSTAT	data	Temporary table created for report "lopstat".
U2406F	data	Temporary intermediate table generated by the 2406 frontside report procedure.

LOGISTICS APPLICATION TABLE DICTIONARY

Table	Type	Contents
UBNROLL	data	Temporary intermediate table generated by the battalion rollup report procedure.
ULOPSTAT	data	Temporary intermediate table generated by the Property Status report procedure.
V2406F	data	Temporary intermediate table generated by the 2406 frontside report procedure.
VEHTYPE	data	Translates vehicle codes to vehicle names.
WEAPTYPE	data	Translates weapon code to weapon name.
X1EMTOE	index	Index on table "EMTOE".
X1LODOCREG	index	Index on table "lodocreg".
X1LOHAND	index	Index on table "lohand".
X1LOPLL	index	Index on table "lopll".

LOGISTICS APPLICATION TABLE DICTIONARY

Table	Type	Contents
X2LOHAND	index	Index on table "lohand".
X3LOHAND	index	Index on table "lohand".
X4LOHAND	index	Index on table "lohand".
X5LOHAND	index	Index on table "lohand".

6.4 REPORT DICTIONARY

LOGISTICS APPLICATION REPORT DICTIONARY

Report	Contents

BACK_2406   DA form 2046 backside report.

This report reads the contents of temporary table t2406b and outputs all rows
where the action code is not 'R', and the date-not-available is not blank, or
the date admitted to support maintenance is not blank.

BTRY_ROLLUP   Battery level rollup report.

BT_PROP_LIST Battery level property list.

HANDRECEIPT   Hand receipt report.

LO2406F   DA form 2406 frontside report.

This report reads the contents of temporary table "t2406f" and outputs all the
rows sorted by sequence number.

LOBNPLLREP   Batallion Prescribed Load List report.

This report reads the contents of temporary table lobnpllrpt and outputs all the
rows sorted by NSN.

LOBNROLL   Batallion Property Rollup report.

This report reads the contents of temporary table "tbnroll" and outputs all the
rows sorted by RLIN,UIC.

LODOCREG   Document Register report.

This report reads the contents of table "lodocreg" and outputs all the rows that
contain the user's dodaac code, with the following modifications: transaction
date is the left 4 characters of the document number, document serial number is
the right 4 characters of the document number. The NSN gets hyphens inserted in
it in the following format; 'xxxx-xx-xxx-xxxx'. The followup field is the
follow-up status concatenated with the follow-up text (usually only one will be
present). The rows are sorted by DODAAC, transaction date, and document serial

Report   Contents
-------------- --

number.

LOEMTOE   Table of Equipment report.

This report reads the contents of the "emtoe" table and outputs all the rows with
the description from "loline" where a match occurs on line number.

LOEXCESSREPT   Excess parts report.

LOHANDREP   Hand Receipt Forms report.

This report reads the contents of several tables and outputs the following
fields from "loholder": UIC, handreceipt#, SSN of holder. From "lohand": line
number, NSN, serial#, and on hand quantity. From soldier: soldier name. From
"loline": description, model, and unit of issue. Only UICs and hand receipt
numbers are used that match those specified by the user. The rows from the
tables are matched on UIC, handreceipt#, SSN of holder, and line number. The
rows are output sorted by UIC, hand receipt#, and NSN.

LOHRCO   Hand Receipts Components report.

This report reads the contents of the "lohand" table and outputs all rows that
have a 'Y' in the comp field where the line number matches that of the parent
UIC, handrec, and NSN specified by the user. The report looks very similar to
the regular Hand Receipt report except that it lists just the components of one
parent item by type (i.e., each of COEI, AAL, and BII types are printed on a
separate page).

LOPHAND   Hand Receipt report.

This report reads the contents of temporary table "tlophand" and outputs all the
rows sorted by LIN, comp, NSN, serial.

LOPLL   Precribed Load List report.

LOGISTICS APPLICATION REPORT DICTIONARY

Report	Contents

LOPLLREP   Battery Prescribed Load List report.

This report reads the contents of temporary table "lopllrpt" and outputs all the
rows where the UIC matches that specified by the user, sorted by UIC, NSN. In
addition, the battery is obtained from the "batterycodes" table where a match is
found on UIC.

LOPROPTY   Property report.

LOPSTAT   Property Status report.

This report reads the contents of temporary table "tlopstat" and outputs all the
rows sorted by LIN, NSN, serial.

LOREPREP   Repair History report.

This report reads the contents of "lorepair" and outputs all the rows sorted by
bumprack, occur. In addition, description and model are obtained from "loline",
and bumprack and UIC are obtained from "lohand". Matches are made on NSN, serial
and LIN.

LOSERVREP   Service Schedule report.

This report reads the contents of the "loservice" table and outputs all the rows
where the service-performed-date is blank, the UIC matches that specified by the
user, and where the due date falls within the period specified by the user. The
following fields are obtained from "loline": description and model (where a match
occurs on LIN). The following fields are obtained from "lohand": bumprack, UIC,
NSN, and serial (where a match occurs on NSN, and serial). The rows are sorted
by bumprack and due.

6.5 PROCEDURE DICTIONARY

LOGISTICS APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
HLODOCUPD	HLODOCUPD.QF		Prints the Document Register menu help file.
HLOGMENU	HLOGMENU.QF		Prints the main menu help file.
HLOHANDMENU	HLOHANDME.QF		Prints the Hand Receipt menu help file.
HLOMAINTMENU	HLOMAINTM.QF		Prints the maintenance menu help file.
HLOPARTSMENU	HLOPARTSM.QF		Prints the Parts menu help file.
HLOPROPMENU	HLOPROPME.QF		Prints the Property menu help file.
HLOROLLMENU	HLOROLLME.QF		Prints the Rollup menu help file.
LO2406B	LO2406B.QF		Creates temporary table t2406b from which the 2406 backside report is printed.

This procedure creates temporary table "t2406b" containing a row for every 2406 reportable item (vehicles, howitzers, etc.) that is in the "lorepair" table. Next, niino is fetched from the "lodocreg" table for all rows that have parts on order. Then, all action codes 'R' are changed to 'Z' and the table is sorted by 2406 sequence number, serial number, occurrence date (reverse chronological order), and action code (reverse alphabetical order). Then, each row is read from the beginning of the table. If the first row for a particular item is a 'Z' (repaired) all remaining rows for that vehicle are skipped. Otherwise the

Procedure	Source File	Form	Contents

occurrence date is copied to the appropriate field to indicate when the action occurred. Finally, action codes are changed from their original O, S, and X to B, C, and D and the table is ready for the 2406 backside report.

LO2406F	LO2406F.QF		Creates temporary table t2406f for the 2406 frontside report.

This procedure first asks the user for the reporting period (beginning and ending dates), then creates temporary table t2406f containing a row for each row in the "lohand" table that has a non-blank 2406 sequence number. The fields lin and rlin are then copied over from "lohand". The model field is copied from loline. The on-hand quantities are summarized by seqno and copied from "lohand". The procedure next calculates the possible days as the quantity on-hand multiplied by the number of days in the reporting period for each row. Temporary table u2406f is created and filled with data from the "lorepair" table where a match is found on nsn and serial number. All 'R' action codes are changed to 'Z' and the table is sorted into reverse chronological order. All repair dates that fall outside the reporting period are changed to the closest date of the reporting period and the number of days each action code was in effect is calculated. The following are tallied and placed in t2406f: total non-available days, organization maintenance days, support supply days, and support maintenance days (for each row in t2406f). Next, the total available days is calculated as possible days minus non-available days. Next, temporary table v2406f is created and filled with one row for each sequence number in t2406f that has a trailing alphabetic character (the character is removed for this table.) All numeric fields in t2406 are summarized and placed in the rows in v2406f. When the rows are copied into t2406 it is ready for printing.

LOBNPLLUPD	LOBNPLLUP.QF		Creates temporary table "lobnpllrpt" containing Battalion PLL data.

This procedure creates temporary table "lobnpllrpt" containing data from "lopll", "loplldesc", and "lodocreg" where a match is found on NSN. The table is left ready to be printed by the Battalion PLL report.

LOBNROLL	LOBNROLL.QF		Creates temporary table "tbnroll" containing Battalion Property Rollup data.

This procedure creates temporary table "ubnroll" containing all known line numbers and UICs from the "loline" table. Then the table is sorted by rlin and UIC to remove duplicates. Next, another temporary table called "tbnroll" is created and

Procedure	Source File	Form	Contents

filled with the rows from "ubnroll" (extra fields are initialized with blanks). Required and authorized quantities are copied in from the "emtoe" table, nsn, substitute line and on-hand quantities are copied in from the "lohand" table. Percent fill is calculated for each reportable line number as the sum of the on-hand quantities over the sum of the authorized quantities. Finally, description, model, unit of issue, and erc are copied from "loline". When price is copied from "lonsn" the table is ready to be printed.

| LOHRCO | LOHRCO.QF | | Creates temporary table "tlohrco" containing Hand Receipt Components data. |

This procedure creates temporary table "tlohrco" from the rows in "lohand", "locomp", loline where a match is found on the parent nsn's line number. Also, the holders ssn and name are obtained from "loholder" and "soldier" tables.

| LOPHAND | LOPHAND.QF | | Creates temporary table "tlophand" containing info for the hand receipt report. |

This procedure creates temporary table "tlophand" containing the following fields from "lohand": lin, rlin, nsn, serial, usa, bumprack, comp, seqno, auth, on-hand, unit, and handrec. Then the following fields are initialized with blanks, then filled in (where data exists) from "loline", "loholder", "lorepair", "soldier", "locomp", and "lonsn": desc, model, sec, name, status, action, remark, job, req, and occur. Note, only the most recent rows from "lorepair" are used. Finally, rlin is replaced with blanks where it is the same as lin. Then the table is ready to be printed. The purpose of this report is to provide all the information that is known about each item of property within the battalion.

| LOPHANDPR | LOPHANDPR.QF | | Prints the Parent Item Hand Receipts. |

This procedure prints the contents of the lophand.lis file created by the "lophand" report.

LOGISTICS APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
LOPLLUPD	LOPLLUPD.QF		Creates temporary table "lopllrpt" containing battery PLL data.

This procedure creates temporary table "lopllrpt" from the rows in "lopll", "loplldesc", and "lodocreg" where a match is found on nsn. The purpose of the report is to provide all the known information about the current state of the Prescribed Load List, including all items on order in the document register.

| LOPROPTY | LOPROPTY.QC | | Prints the property report. |

| LOPRT2406 | LOPRT2406.QF | | Prints the 2406 backside report. |

This procedure prints the contents of file lo2406b.lis created by report "back_2406".

| LOPRT240F | LOPRT240F.QF | | Prints the 2406 frontside report. |

This procedure prints the contents of file lo2406f.lis created by report "lo2406f".

| LOPRTBNPLL | LOPRTBNPL.QF | | Prints the battalion PLL report. |

This procedure prints the contents of file lobnpll.lis created by report "lobnpllrep".

| LOPRTDOC | LOPRTDOC.QF | | Prints the Document Register report. |

This procedure prints the contents of file lodocreg.lis created by report "lodocreg."

| LOPRTEMTO | LOPRTEMTO.QF | | Prints the Table of Equipment report. |

This procedure prints the contents of file loemtoe.lis created by report "loemto".

| LOPRTHAND | LOPRTHAND.QF | | Prints the Hand Receipt forms. (Parent items.) |

This procedure prints the contents of file lohand.lis created by report "lohandrep".

LOGISTICS APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
LOPRTHRCO	LOPRTHRCO.QF		Prints the Hand Receipt Components forms.

LOPRTPLL   LOPRTPLL.QF   Prints the battery PLL report.

This procedure prints the contents of file lopll.lis created by report "lopllrep".

LOPRTREP   LOPRTREP.QF   Prints the Repair History report.

This procedure prints the contents of file loreprep.lis created by report "loreprep".

LOPRTROLL   LOPRTROLL.QF   Prints the Battalion Property Rollup report.

This procedure prints the contents of file lobnroll.lis created by report "lobnroll".

LOPRTSERV   LOPRTSERV.QF   Prints the Service Due report.

This procedure prints the contents of file loservrep.lis created by report "loservrep".

LOPRTSTAT   LOPRTSTAT.QF   Prints the Property Status report.

This procedure prints the contents of file lopstat.lis created by report "lopstat".

LOPSTAT   LOPSTAT.QF   Creates temporary table tlopstat for the Property Status report.

This procedure first asks the user for his UIC, then creates temporary table "tlopstat" containing the following data from table "lohand": uic, lin, rlin, nsn, serial, usa, bumprack, seqno, onhand, and handrec. Then the following fields from "loline" are added to those rows already in place: desc, model, and unit of issue. Then the hand receipt holders name is copied from the soldier table. Then another temporary table called "ulopstat" is created to hold all the repair history from "lorepair". The latest repair action, status, remarks, requisition number, and job number is copied to the "tlopstat" table (for all those items that have repair history). The tlopstat "table" is now ready for printing.

LOGISTICS APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
LOREPUPD	LOREPUPD.QF		Allows user to update the Repair History table.

This procedure first asks the user for his UIC, and the bumper number of the vehicle, generator, or howitzer he wishes to access. The procedure next displays a screen showing the latest repair history records for this item and allows the user to update the job number, req number, and remarks of old records or to enter the date, type of action, status code, etc., of new records. The user may also delete old records. This table is used to create the repair history report, and also the 2406 frontside and backside reports; in addition the latest repair history is used in the property status, and hand receipt reports.

Procedure	Source File	Form	Contents
LOSERVUPD	LOSERVUPD.QF		Allows the user to update the Service Schedule table.

This procedure first asks the user for his UIC, and the bumper number of the vehicle, generator, howitzer etc., he wishes to access. The procedure next displays a screen showing all the currently scheduled services for this item, and allows the user to update the actual servce performed data for old records, or enter new records. The user may also delete old records. The information in this table is used to produce the service schedule report.

6.6 SPECIAL OPERATIONS AND MAINTENANCE PROCEDURES

The ".MOD" files found in the directory [ATUTMS.LOGISTICS] should be executed periodically to prevent updates from causing performance degradations. The tables "lohand" and "lodocreg" should be watched closely due to their size and volatility. An example of using a ".MOD" file is given in Section 2.2.3.4 .

As new users are authorized to use the Logistics application and old users are transferred to other duties, the ".PMT" files which contain the table access permits for Logistics must be updated and executed. An example of executing a ".PMT" file is given in Section 2.2.3.5.

SECTION 7

UTILITIES APPLICATION

The Utilities application is intended to give ATUTMS access to VMS system utilities and information. It currently provides access to the VMS MAIL program and makes available the identities of all ATUTMS users via an INGRES table (Users) which is initialized from the VMS User Authorization File (UAF). It also provides a place to locate various FORTRAN utility subroutines shared by the Personnel, Training and Logistics applications. These include subroutines for printing reports and using EQUEL/FORTRAN.

7.1 DESIGN PHILOSOPHY

The Utilities application is intended to provide the standard ABF menu interface to VMS utility programs. VMS programs, such as MAIL, can be called from ABF by creating a FORTRAN procedure and calling the system library routine LIB$SPAWN to run a DCL command or command procedure as a subprocess. When the subprocess terminates, control is returned to ABF.

7.2 BLOCK DIAGRAM

A high-level view of the Utilities application is shown in Figure 7-1. Note the lack of strong links to any of the other applications. The services provided here are strictly for convenience of the user or programmer.

7.3 STRUCTURE DIAGRAM

The internal structure of the Utilities application is presented in Figure 7-2 in terms of the frames (menus), procedures and forms used to define it. The hierarchy of the flow of control is indicated by the indentation on the left. For more information about any item shown below, refer to the dictionaries in the sections which follow.

7-1

Figure 7-1. UTILITIES BLOCK DIAGRAM

```
User Interface                      +------------+
                                    |  UTILITIES |
                                    +------------+
                                          |
                        ---------------------------------
                        |                               |
                +---------------+              +------------------+
                |  USER NAMES   |              | ELECTRONIC MAIL  |
                +---------------+              +------------------+
                        |
 - - - - - - - - - - - -|- - - - - - - - - - - - - - - - - - - - - - - -
Database                |
   (Utilities)       +--------+
                     | USERS  |
                     +--------+
```
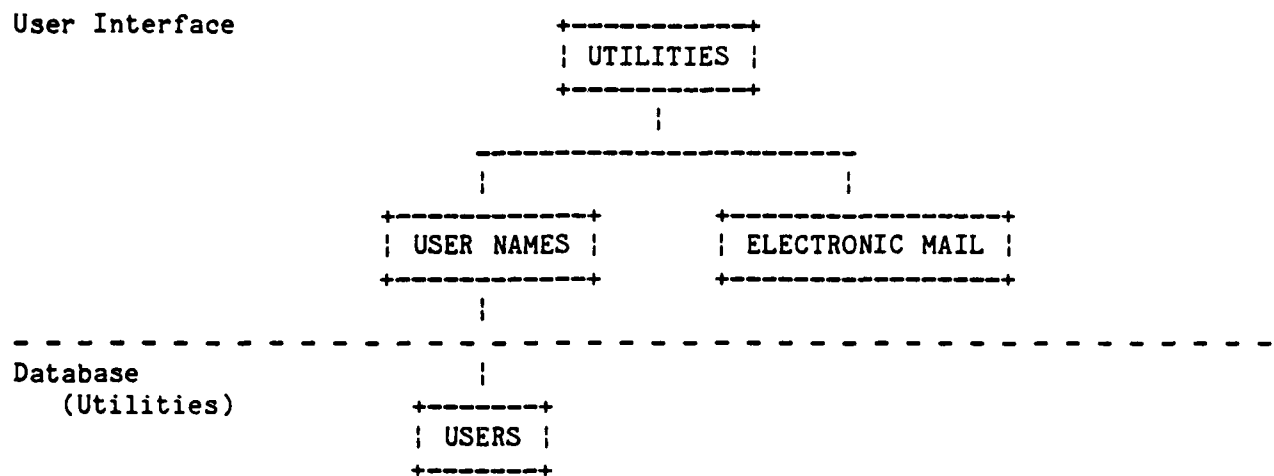
Figure 7-2. UTILITIES APPLICATION STRUCTURE DIAGRAM

Entity	Type	Comments
UTILTITYMENU	FRAME	Main Utilities menu.
MAILCALL	PROC	Spawns VMS MAIL command.
USERMENU	FRAME	Provide access to User names.
USERAPPN	FORM	QBF form for append to Users table.
USERUPD	FORM	QBF form for update to Users table.
USERRET	FORM	QBF form for retrieve of Users table.
USERPRNT	PROC	Spawns USERPRNT.COM
USERPRNT.COM	PROC	DCL proc runs, prints report.

7.4 PROCEDURE DICTIONARY

UTILITIES APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
APPENDFORM	APPENDFOR.QF		Simulates QBF in Append mode from EQUEL/FORTRAN for any INGRES table.

Given a form name and a character array of sufficient size, this routine simulates the operation of QBF in append mode from EQUEL/FORTRAN. Parameterized QUEL and forms statements are automatically generated with the utility routines SPECFORM and GENADDR. All numeric types of storage are provided as well. The programmer has only to create a form with VIFRED, specify its QBF name and provide an array of character strings large enough to hold the largest string in the table (see the routine GENADDR1 for an exception). The information about this form as well as the database/forms data transfer buffers are located in the common block FORMS(see the file FORMSBLOCK.QF in the Utilties application directory). To change the maximum number of fields in a form that this routine can handle, the common block must be updated.

| APPENDROW | APPENDROW.QF | | Appends a row to the table specifed in the common block FORMS. |

This routine appends a row to the table currently identified in the common block FORMS. This block must first be initialized by the routines SPECFORM (collects control information) and GENADDR (assigns data transfer buffers) before calling this routine. See APPENDFORM for an example of how this is useful as a generalized Append statement. The common block QUEL is also referenced by this routine. It is defined in the file QUELBLOCK.QF in the Utilities application directory.

BEEPFORM	BEEPFORM.QF		Rings the bell at the terminal from EQUEL/FORTRAN.
BUILDMSG	BUILDMSG.QF		Builds a string out of three substrings to allow embedding of values in messages.
CHECKDATE	CHECKDATE.QF		Checks a string for a valid INGRES date format, returns error flag if not.

UTILITIES APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
CLEARFORM	CLEARFORM.QF		Clears the terminal screen from EQUEL/FORTRAN.
FIELDOPER	FIELDOPER.QF		Converts the relational operator code number used by EQUEL/FORMS to <,=,>, etc.

The INQUIRE_FRS statement can be used to obtain the type of relational operator entered into a form by the user. This routine converts the code number obtained to the appropriate ASCII character.

| FIELDTYPE | FIELDTYPE.QF | | Converts the data type code of a field on a form to i4, f8 or c. |

The EQUEL/FORTRAN INQUIRE_FRS statement can be used to retrieve the data type code of the current field (as determined by the cursor position). This routine converts that code to its character representation – i4, f8 or c.

| FORMTABLE | FORMTABLE.QF | | Identifies table on which a form is defined using the Qbfmap system catalog. |
| GENADDR | GENADDR.QF | | Generates addresses of data transfer areas for database <–> transactions. |

This routine can be used along with SPECFORM to initialize the common block FORMS with addresses of data transfer areas required for using parameterized EQUEL and FORMS statements. Automatic generation of parameter lists frees the programmer from a significant amount of detail work. See APPENDFORM and APPENDROW for an example of how it is used.

| GENADDR1 | GENADDR1.QF | | Provides storage for very long strings using common block FORMS. |

This routine provides an alternative means of allocating storage for routines such as APPENDFORM which provide generalized database/forms data transfers. It allows you to specify individual buffers for very long strings as opposed to using entire arrays as in the routine GENADDR. See the routines GENADDR and SPECFORM for details.

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UTILITIES APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
GENTARGET	GENTARGET.QF		Builds target strings for parameterized EQUEL statements.

This routine is normally called from within a FORMDATA loop to build up a parameterized list for transferring data to or from a form based on the structure of the form. An example of this can be found in SPECFORM.

GENWHERE	GENWHERE.QF		Generate a "where-clause" while looping through a FORMDATA loop.

This procedure is called by READFORM to build up a "where-clause" for a query based on the data entered by the user. In this way it can be used to simulate QBF from FORTRAN. See also QUERYFORM and SHOWFORM.

GETROW	GETROW.QF		Parameterized EQUEL getrow command using data in common block FORMBLOCK.
GET_FORM	GETFORM.QF		Parameterized EQUEL getform command using common block FORMBLOCK.
HELPFILE	HELPFILE.QF		Allows user to page through a help file a screen at a time.
MAILCALL	MAILCALL.QC		Spawns a subprocess which calls the VMS MAIL utility.
MENUFORM	MENUFORM.QF		Simulates an EQUEL command menu in FORTRAN with partial character matches.

UTILITIES APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
MSGFORM	MSGFORM.QF		Build a message and send it to the screen in an EQUEL environment.
PRINTCIT	PRINTCIT.QF		Send a file to a CIT-1550B printer attached to a CIT-101 terminal aux. port.
PRTREPORT	PRTREPORT.QF		Print an ATUTMS report at a local printer.
PUT_FORM	PUTFORM.QF		Parameterized EQUEL putform command using data in common block FORMBLOCK.
QUERYFORM	QUERYFORM.QF		Simulates QBF in query mode from EQUEL/FORTRAN.
READFORM	READFORM.QF		Reads a form and builds a query based on data entered by the user.
REPLACEROW	REPLACERO.QF		Parameterized EQUEL replace statement using data in common block forms.
RETRIEVEROW	RETRIEVER.QF		Parameterized EQUEL retrieve statement using data from common block FORMBLOCK.

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UTILITIES APPLICATION PROCEDURE DICTIONARY

Procedure	Source File	Form	Contents
SETWIDTH	SETWIDTH.QF		Sets a VT100-compatible terminal to the desired width for viewing or printing.
SHOWFORM	SHOWFORM.QF		Displays a form using data in common block FORMBLOCK (see QUERYFORM).
SPECFORM	SPECFORM.QF		Read a form via FORMSLOOP and initialize the common block FORMBLOCK.
STRCAT	STRCAT.QF		Con^atenate twp strings in FORTRAN.
TRAPDESTROY	TRAPDESTR.QF		Trap an INGRES destroy error message.
TYPEFILE	TYPEFILE.QF		Display a file on a VT100-compatible terminal at the appropriate width.
USERPRNT	USERPRNT.QC		Run and print a report on ATUTMS users.
WINDOWFORM	WINDOWFOR.QF		Put text into any window on the screen.

Procedure	Source File	Form	Contents
YESNO	YESNO.QF		Prompt user for YES or NO answer in the EQUEL/FORTRAN environment.

7.5 SPECIAL OPERATIONS AND MAINTENANCE PROCEDURES

To add or modify a FORTRAN utility subroutine, an ABF procedure frame must be created in Utilities and be used to create and compile the subroutine. This puts it into the ABF object library file. It must then be transferred to the ATUTMS EQUEL/FORTRAN library file [ATUTMS.UTILITIES]EQUELFORT.OLB so that it will be available to ABF when an application is linked (See 2.2.4.1). The command procedure [ATUTMS.UTILITIES]EQUELFORT.COM should be used to move it the EQUEL/FORTRAN library after compiling.

The table Users must be periodically updated from the VMS UAF file by using MC AUTHORIZE (see VAX System Management and Operations Guide) to generate a new list of users, editing this file, and then loading it into the table Users via the QUEL Copy command.

7.6 DEVELOPMENT NOTES

Other programs which could be made available from Utilites include PHONE, MUSE and FINGER (lists current users and their activities).

SECTION 8

ATUTMS SYSTEMS OPERATIONS

Some common procedures required to operate and maintain both VMS and INGRES are highlighted here. The documents noted should be referenced for complete details.

8.1 VMS PROCEDURES

8.1.1 Security

Refer to the VAX/VMS System Management and Operations Guide, Chapter 3 for details on security. Note that all security ultimately depends on a user's password. It must be protected at all times and changed frequently.

8.1.2 Authorizing New VAX Users

Refer to the VAX/VMS System Management and Operations Guide, Chapter 2 for user authorization procedures. All personnel requesting an account must first obtain permission from their commander or his representative.

8.1.3 Backing Up The System On Tape

The disk drive must periodically be copied to tape to provide a recovery capability in case of disk failure or accidental deletion of files. The frequency with which backups are made depends on the level of activity on the system. The maximum interval should be no more than one week. Several versions of previous backup tapes should be made for protection against tape failure. Details in the BACKUP command can be found in the RMS Utilities Reference Manual.

8.1.4 Tracking Errors

The mail box GRIPE should be checked periodically for complaints from users. The mail box SUGGESTION should also be checked. The analysis of each problem and its eventual solution should be forwarded to the mail box ATUTMS.

8.2 INGRES PROCEDURES

8.2.1 Authorizing New INGRES Users

After a new user has received a VMS account and password, he can be given access to the ATUTMS database by running the ACCESSDB program described in the INGRES Installation and Operations Guide. Care must be taken to assign each user the appropriate priviliges both within ACCESSDB and in the permit files (see the section below on Security).

8.2.2 Maintenance

Several maintenance procedures common to INGRES databases are outlined below. The documents noted should be referenced for full instructions.

8.2.2.1 Security

Security depends on maintaining the permit (.PMT) files found in each application directory (i.e., [ATUTMS.PERSONNEL], [ATUTMS.TRAINING] etc.). Personnel requesting access to the ATUTMS should have authorization from their commander or his representative. INGRES uses the VMS username as the basis of its protection so users must be encouraged to keep their VMS passwords secret.

8.2.2.2 Running SYSMOD

About once a month, a SYSMOD should be run on the ATUTMS database to permit optimal performance. This should be done during off-peak hours. See the INGRES Reference Manual for more details. A SYSMOD should also be run periodically on INGRES' internal database "DBDB". See the INGRES Installation and Operations Guide for details.

8.2.2.3 Running RESTOREDB

If a serious error occurs, such as the machine crashing due to a power failure or a user using CTRL-Y to exit the database, it may be necessary to run RESTOREDB to close open files and perform general clean up. If this is required, INGRES will write a message to the screen informing you that a RESTORE is necessary. See the INGRES Reference Manual for more details.

8.2.2.4 Running UNLOADDB

The ATUTMS database can be copied to standard VMS files by using the VMS BACKUP utility. This is a convenient way to make an extra copy of the data while testing the system.

APPENDIX A

ATUTMS DATABASE TABLES

This appendix lists every table in the ATUTMS database alphabetically. The type of table, the application which maintains it and a brief description of its contents are also included.

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TABLE INDEX

Table	Type	Application	Contents
ARTEP	data	training	ARTEP codes and titles.
ASSIGNED	view	personnel	Subset of the fields in the soldier record that are used to assign a new soldier.
ATTACHED	view	personnel	Contains fields in soldier table needed if he is attached.
ATTFORMAT	data	dd	Converts internal INGRES data type codes to their full names.
B2WAGJ	data	logistics	Contents of original tapes from DLOGS.
BATTERYCODES	data	personnel	Translation of battery mnemonics to UPC and UIC codes.
BNPERSONN	data	personnel	Temporary table used by report Bn_personnel.
CIVEDCODES	data	personnel	Civilian education codes.
CLEARANCE	data	personnel	Contains codes for security clearances.
CONDITIONS	data	personnel	Contains conditions for special condition roster and their deployability.
DAILYRPT	data	personnel	Temporary table used in generating Daily Status Report.
DAILYSTATUS	data	personnel	Temporary table used by report Daily_status.
DRIVERS	data	personnel	This table identifies drivers and the types of licenses they hold.
DRIVSSNX	index	personnel	Index on table "drivers".
E3WAGJ	data	logistics	Contains data from original DLOGS tapes.
EMTOE	data	logistics	Equipment portion of MTOE.
EVENT	data	training	Time, location, subject and participants of scheduled training events.
EVENTSOLDIER	data	training	Identifies individual soldiers to be trained in a scheduled training event.
EVENTSUMMARY	view	training	This view is used by report Event.
EVENTTASK	data	training	This table identifies the tasks to be trained in a scheduled training event.
EVENTUNIT	data	training	This table identifies the units participating in a scheduled training event.
G3WAGJ	data	logistics	Contains data fromm original DLOGS tapes.
GRADES	data	personnel	This table cross references grade to rank.
GTRPT	data	personnel	Temporary table used to generate GT score report.
HANDRPT	data	logistics	Temporary table used to generate Hand Receipt report.
HOLDRPARAX	index	logistics	Index on table "loholder".
LOBNPLLRPT	data	logistics	Temporary table created for report lobnpllrep.

TABLE INDEX

Table	Type	Application	Contents
LOCOMP	data	logistics	logistics property components.
LODOCREG	data	logistics	Logistics document register.
LOEXCESSPART	data	logistics	Logistics excess parts.
LOHAND	data	logistics	Logistics hand receipt information.
LOHANDRET	view	logistics	View of lohand with soldier name and item description included.
LOHOLDER	data	logistics	Logistics hand receipt holders.
LOLINE	data	logistics	Logistics line items.
LONSN	data	logistics	Logistics stock number information.
LOPLL	data	logistics	Logistics Perscribed Load List.
LOPLLDESC	data	logistics	Logistics Perscribed Load List descriptions.
LOPLLRPT	data	logistics	Temporary table created for report lopllrep.
LOREPAIR	data	logistics	Logistics vehicle repair history.
LOSERVICE	data	logistics	Logistics vehicle service schedules.
MILEDCODES	data	personnel	Military education codes.
MISSION	data	training	Missions for which units must be trained.
MOS	data	personnel	Current MOS codes available in the battalion. Temporary table.
MOSSCORE	view	training	This view is used by the Mosscore reports.
MOSSCORE2	view	training	View used by report Mosscore2.
MPCCODES	data	personnel	This table assigns a non-alphabetic sort sequence to military position codes.
OMPOSX	index	personnel	index on OMTOE for position.
OMTOE	data	personnel	Personnel portion of the Modification Table of Organization and Equipment.
PERSONAL	view	personnel	Contains those fields in the soldier record of a personal nature.
PRP	data	personnel	Personnel Reliability Program data.
PTQUALV	view	training	View of table TTPTQUAL which automatically calculates pass/fail using score data.
QUALS	view	personnel	Contains those fields in the soldier record that relate to his qualifications.
RELIGION	data	personnel	Religious preference codes.
SCHEDULE2	data	training	Temporary table used by report Schedule2, the detailed training schedule.
SCHEDULER	data	training	Initials of training event scheduler and count of events scheduled.
SCTYSTATS	data	personnel	Contains the codes for security clearance investigation status.
SEPRATS	data	personnel	Temporary table used in "canned query" for separate rations.

TABLE INDEX

Table	Type	Application	Contents
SERVICE	view	personnel	Contains those fields in the soldier record that relate to the service as a whole.
SIDPERS	data	personnel	Contains all the fields exactly as they are on the SIDPERS SPF file.
SKILLINVTRY	data	personnel	Temporary table used by the report Skill_invtry.
SOLDIER	data	personnel	Individual soldier record.
SOLDIERDD	data	personnel	Dictionary for the fields in the SOLDIER table.
SOLDIERSCORE	data	training	Common skills and MOS training scores.
SONAMEX	index	personnel	Index on table "soldier".
SOPOSX	index	personnel	Index on position in the table "soldier".
SORTMPC	data	personnel	Assigns non-alpha sort code to Military. Position Codes - O,W,E.
SOSSNX	index	personnel	Index on ssn for the table "soldier".
SPECIAL	data	personnel	Contains soldiers with special or derrogatory conditions.
STATCODES	data	personnel	Personnel status codes.
STATSSNX	index	personnel	Index on ssn for the table "status".
STATUS	data	personnel	Daily status of each soldier.
T2406B	data	logistics	Temporary table containing data for the 2406 backside report.
T2406F	data	logistics	Temporary table created for report lo2406f.
TASK	data	training	Code and title of all tasks, collective and individual.
TASKSUMMARY	view	training	View used by report Tasksummary.
TBNROLL	data	logistics	Temporary table created for report lobnroll.
TLOPHAND	data	logistics	Temporary table created for report lophand.
TLOPSTAT	data	logistics	Temporary table created for report lopstat.
TRANSIENT	data	personnel	Codes for transient personnel used primarily by report Unit_manning.
TTPTQUAL	data	training	PT qualification data.
TTWEAPONQUAL	data	training	Weapons qualification data.
U2406F	data	logistics	Temporary intermediate table generated by the 2406 frontside report procedure.
UBNROLL	data	logistics	Temporary intermediate table generated by the Batallion rollup report procedure.
ULOPSTAT	data	logistics	Temporary intermediate table generated by the Property Status report procedure.
UMR	data	personnel	Temporary table used by report unit_manning.
UNITDATA	view	personnel	Contains those fields in the soldier record relating to his current unit.

TABLE INDEX

Table	Type	Application	Contents
UNITS	data	personnel	Unit names down to the section level.
UNITSCORE	data	training	Scores of collective task training.
USERS	data	utility	Names of system users.
V2406F	data	logistics	Temporary intermediate table generated by the 2406 frontside report procedure.
VEHTYPE	data	logistics	Translates vehicle codes to vehicle names.
WEAPTYPE	data	logistics	Translates weapon code to weapon name.
X1EMTOE	index	logistics	Index on table "emtoe".
X1LODOCREG	index	logistics	Index on table "lodocreg".
X1LOHAND	index	logistics	Index on table "lohand".
X1LOPLL	index	logistics	Index on table "lopll".
X2LOHAND	index	logistics	Index on table "lohand".
X3LOHAND	index	logistics	Index on table "lohand".
X4LOHAND	index	logistics	Index on table "lohand".
X5LOHAND	index	logistics	Index on table "lohand".
XARTEPARTEP	index	training	Index on table "artep".
XEVENT1	index	training	Index on table "event".
XEVSOLD1	index	training	Index on table "eventsoldier".
XEVTASK1	index	training	Index on table "eventtask".
XEVUNIT1	index	training	Index on table "eventunit".
XSOSCORE1	index	training	Index on table "soldierscore".
XSOSCORE2	index	training	Index on table "soldierscore".
XSOSCORE3	index	training	Index on table "soldierscore".
XTASK1	index	training	Index on table "task".
XUNSCORE1	index	training	Index on table "unitscore".
XUNSCORE2	index	training	Index on table "unitscore".

APPENDIX B

DETAILED TABLE DICTIONARIES

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
ASSIGNED			Subset of the fields in the soldier record that are used to assign a new soldier.
ACTIVE_SERV	charact	6	Basic Active Service Date
ARRIVE_DATE	charact	6	Date Arrived at Post
ASI	charact	2	Additional Skill Identifier
BATTLE_POS	charact	4	Position in Wartime
BONUS_MOS	charact	3	Reenlistment Bonus MOS
CITIZEN	charact	1	Citizenship Status
CIV_EDUC	charact	10	Civilian Education
COMBAT_AREA	charact	10	Area of Last Combat Tour
CUR_PROMO_DT	charact	4	Current Promotion Date
CUR_PROMO_PT	integer	2	Current Promotion Pts
DASI	charact	2	Duty Additional Skill Identifier
DATE_LOSS	charact	6	Anticipated Date of Loss
DAYS_LEAVE	integer	2	Number of Days Leave
DEPART_DATE	charact	6	Actual Date of Departure
DEPENDENTS	integer	1	Number of Dependents
DMOS	charact	5	Duty MOS
DOB	charact	6	Date of Birth
DOR	charact	6	Date of Rank
ETHNIC	charact	5	Ethnic Group Designator
ETS_DATE	charact	6	Expiration Term of Service
FORGN_SERV	charact	10	Area of Last Foreign Service
GRADE	charact	2	Pay Grade
GT_SCORE	integer	2	General Technical Aptitude Score
LANG	charact	2	Language Identifier
LAST_COMBAT	charact	6	Year and Month - Last Combat
LAST_ER	charact	6	Year and Month - Last Efficiency Rating
MARITAL	charact	1	Marital Status
MEALCARD	integer	4	Mealcard Number
MEALCARD_DT	charact	6	Date Mealcard Issued
MIL_EDUC	charact	10	NCO Graduate/Military Education Level
MOS	charact	5	Military Occupational Specialty Code
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
OJT_DT	charact	6	Year and Month of OJT Completion
PAYROLL_NO	integer	4	
PAY_ENTRY	charact	6	Pay Entry Basic Date (PEBD)
PHOTO_SUSP	charact	6	Year and Month of Photograph Suspense
PHYS_CATEG	charact	1	Physical Category Code
POSITION	charact	4	Duty Position

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
PROMO_IND	charact	1	Promotion Indicator
PULHES	charact	6	Physical Profile
RACE	charact	1	Race
RANK	charact	4	Rank
RATER1	charact	9	Name of first EER or OER rater
RATER2	charact	9	Name of second EER or OER rater
RATER3	charact	9	Name of third EER or OER rater
RATER_DATE	charact	6	Effective Date of Rating
REG_BR	charact	2	Regimental Branch
REG_HOME	charact	10	Regimental Home
REG_NO	charact	4	Regimental Number
RELIGION	charact	10	Religion
REPORT_DATE	charact	6	Date Assigned to this Unit
RET_OS	charact	6	Date Returned from Overseas
SASI	charact	2	Secondary Additional Skill Identifier
SCTY_CLNC	charact	10	Security Clearance
SCTY_STATUS	charact	12	Status of Security Clearance
SEX	charact	1	Sex
SMOS	charact	5	Secondary MOS
SSN	charact	9	Social Security Number
TERM_SERV	integer	1	Term of Service
TF_BADGE	integer	2	TACFIRE Badge Number
UPC	charact	5	Unit Processing Code (UIC)
VERIF_DT	charact	6	Year Verified Secondary MOS
VERIF_SMOS	charact	1	Verification Indicator for Secondary MOS

Table/Field	Type	Size	Table/Field Contents
ATTACHED			Contains fields in soldier table needed if he is attached.
ARRIVE_DATE	charact	6	Date Arrived at Post
ASI	charact	2	Additional Skill Identifier
BATTLE_POS	charact	4	Position in Wartime
DASI	charact	2	Duty Additional Skill Identifier
DEPART_DATE	charact	6	Actual Date of Departure
DMOS	charact	5	Duty MOS
DOB	charact	6	Date of Birth
DOR	charact	6	Date of Rank
GRADE	charact	2	Pay Grade
MEALCARD	integer	4	Mealcard Number
MEALCARD_DT	charact	6	Date Mealcard Issued
MOS	charact	5	Military Occupational Specialty Code

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
POSITION	charact	4	Duty Position
RANK	charact	4	Rank
SEX	charact	1	Sex
SSN	charact	9	Social Security Number
TF_BADGE	integer	2	TACFIRE Badge Number
UPC	charact	5	Unit Processing Code (UIC)

BATTERYCODES			Translation of battery mnemonics to UPC and UIC codes.
BATTERY	charact	3	Codes are A, B, C, SVC or HHB.
BATTERYSEQ	integer	2	Sorting codes: HHB=1,A=2,B=3,C=4,SVC=5.
DOCSEQ	charact	1	
DODAAC	text	6	Conversion to DODAAC code used by Logistics.
UPC	charact	5	Conversion to UPC used by SIDPERS.

BNPERSONN			Temporary table used by report Bn_personnel.
ARRIVE_DATE	charact	6	Date Arrived at Post
ATTCH	charact	1	Attached/Detached Status Flag
CNT_ATTCH	integer	2	Attached Flag.
CURR_STATUS	text	11	Daily Personnel Status
DOR	charact	6	Date Of Rank
ENLIST	integer	2	Enlisted Flag
GRADE	charact	2	Pay Grade
LIC_CLASS	charact	4	Drivers Licence Class
MEALCARD	charact	8	Mealcard Number
MEALCARD_DT	charact	6	Date Mealcard Issued
MOS	charact	5	Military Occupational Specialty Code
MPC	charact	1	Military Personnel Class
NAME	charact	27	Soldier's Name
OFF	integer	2	Officer Flag
SCTY_CLNC	charact	2	Security Clearance
SEP_RATIONS	charact	1	Separate Rations Flag
SSN	charact	9	Social Security Number
SSN	text	9	Social Security Number
STATUS_DATE	charact	6	Date of Personnel Status

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UPC	charact	5	Unit Processing Code (UIC)
WARRANT	integer	2	Warrant Officer Flag

CIVEDCODES			Civilian education codes.
CODE	charact	1	SIDPERS Code
TEXT	charact	10	Description

CLEARANCE			Contains codes for security clearances.
CODE	charact	1	SIDPERS code
TEXT	charact	12	Description

CONDITIONS			Contains conditions for special condition roster and their deployability.
COMMENT	charact	20	
CONDITION	charact	15	Condition or Pending Unfavorable Action
.DEPLOY	charact	1	Deployability Status

DAILYRPT			Temporary table used in generating Daily Status Report. See DAILYSTAT.RW for explanation of fields.
CATEGORY	charact	20	
CATSEQ	charact	1	
MPC	charact	1	
MPCSEQ	integer	2	
NUM	integer	2	
STATSEQ	integer	2	
STATUS	charact	12	
TOTBREAK	integer	2	

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
DAILYSTATUS			Temporary table used by report Daily_status.
CATEGORY	charact	20	Category of status (major heading)
CATSEQ	charact	1	Sequence of category
MPC	charact	1	Military Personnel Class
MPCSEQ	integer	2	Sequence of mpc (O, W, E)
NUM	integer	2	Count of soldiers with this status
STATSEQ	integer	2	Sequence of this status
STATUS	charact	12	Current personnel status
TOTBREAK	integer	2	Flag for total break in report
DRIVERS			This table identifies drivers and the types of licenses they hold.
BUMPER	charact	10	Bumper number of the vehicle he drives
DRIV_POS	charact	10	Assistant or primary driver
LIC_CLASS	charact	10	Type of vehicle: JEEP, 5 TON, 2 1/2 TON, GOAT, TMP
LIC_NO	charact	10	License number
NAME	charact	27	Individual Soldier's Name
SSN	text	9	Social Security Number
STATUS_DATE	charact	6	Date of training status
TRAIN_STATUS	charact	5	Training status
UPC	charact	5	Unit Processing Code (UIC)
DRIVSSNX			Index on table "drivers".
SSN	text	9	Social Security Number
TIDP	integer	4	
GRADES			This table cross-references grade with rank.
GRADE	charact	2	Pay Grade
RANK	charact	4	Rank

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
GTRPT			Temporary table used to generate GT score report. See GTRPT.RW for an explanation of these fields.
ETS_DATE	charact	6	
GRADE	charact	2	
GT_SCORE	integer	2	
NAME	charact	27	
PAY_ENTRY	charact	6	
RANK	charact	4	
SSN	text	9	Social Security Number
UPC	charact	5	
MILEDCODES			Military education codes.
CODE	charact	1	SIDPERS code
TEXT	charact	10	Description
MOS			Current MOS codes available in the battalion. Temporary table.
MOS	text	5	Military Occupational Specialty Code
TITLE	text	50	
MPCCODES			This table assigns a non-alphabetic sort sequence to military position codes.
MPC	charact	1	Military Position Code
MPCNAME	charact	8	Officer, Warrant or Enlisted
MPCSEQ	integer	2	
OMPOSX			Index on OMTOE for position
POS	charact	4	SIDPERS Position Code
TIDP	integer	4	

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
OMTOE			Personnel portion of the Modification Table of Organization and Equipment
ACQ	charact	1	Fourth character of rank field
ASI	charact	2	Additional Skill Identifier
AUTH	float	4	Number of personnel authorized for this position
BRANCH	charact	2	Branch of Service
GRADE	charact	2	Pay Grade
LIC	charact	2	
LINE	integer	2	Line number for this position
MOS	charact	5	Military Occupational Specialty Code
PARA	integer	2	Paragraph number for this section
POS	charact	4	SIDPERS position code
POS_TITLE	charact	24	Title of this position
RANK	charact	3	Rank
RMKS	charact	5	Remarks (coded)
RQD	float	4	Required number of personnel for this position
SUBLINE	integer	1	Sequence number for positions within a line number
UNIT	charact	10	Unit name from OMTOE table
UPC	charact	5	Unit Processing Code (UIC)
PERSONAL			Contains those fields in the soldier record of a personal nature
CITIZEN	charact	1	Citizenship Status
DEPENDENTS	charact	1	Number of Dependents
DOB	charact	6	Date of Birth
ETHNIC	charact	5	Ethnic Group Designator
MARITAL	charact	10	Marital Status
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
RACE	charact	1	Race
RELIGION	charact	5	Religion
SEX	charact	1	Sex
SSN	charact	9	Social Security Number

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
PRP			Personnel Reliability Program data.
COMPL_3180	date	12	Date DA form 3180 was completed
CUST	charact	1	Custodian (Y or N)
C_INIT_SCORE	integer	1	Custodian initial test score
C_INIT_TEST	date	12	Custodian initial test date
C_SEMI_SCORE	integer	1	Custodian semi-annual test score
C_SEMI_TEST	date	12	Custodian semi-annual test date
ED_EVAC	date	12	Emergency Destruction and Evacuation (date)
INIT_3180	date	12	Date DA form 3180 was initiated
INIT_SCORE	integer	1	Score from Initial test
INIT_TEST	date	12	Date of initial test
INIT_TRNG	date	12	Date of initial training
NAME	charact	27	Individual Soldier's Name
POS	charact	4	CRIT or CONT (Critical or Controlled)
QTRLY_TRNG	date	12	Date of last quarterly refresher training
RQD_READ_BEG	date	12	Date that required reading was begun
RQD_READ_END	date	12	Date that required reading was finished
SAS_TEAM	charact	5	Sealed Authentication system team (BTRY)
SEMI_RETEST	date	12	Date of last semi-annual retest
SEMI_SCORE	integer	1	Score from last semi-annual retest
SIDE	charact	4	Red or blue side in SAS team
SSN	text	9	Social Security Number
QUALS			Contains those fields in the soldier record that relate to his qualifications.
ASI	charact	2	Additional Skill Identifier
BONUS_MOS	charact	6	Reenlistment Bonus MOS
CIV_EDUC	charact	1	Civilian Education
CUR_PROMO_DT	charact	10	Current Promotion Date
CUR_PROMO_PT	charact	4	Current Promotion Pts
DASI	charact	5	Duty Additional Skill Identifier
DMOS	charact	10	Duty MOS
DOR	charact	6	Date of Rank
GRADE	charact	2	Pay Grade
GT_SCORE	charact	6	General Technical Aptitude Score
LANG	charact	2	Language Identifier
MIL_EDUC	charact	10	NCO Graduate/Military Education Level
MOS	charact	5	Military Occupational Specialty Code
NAME	charact	27	Individual Soldier's Name

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
OJT_DT	charact	6	Year and Month of OJT Completion
PHYS_CATEG	charact	1	Physical Category Code
PROMO_IND	integer	2	Promotion Indicator
PULHES	charact	6	Physical Profile
RANK	charact	4	Rank
SASI	charact	5	Secondary Additional Skill Identifier
SCTY_CLNC	charact	10	Security Clearance
SCTY_STATUS	charact	12	Status of Security Clearance
SMOS	charact	10	Secondary MOS
SSN	charact	9	Social Security Number
VERIF_DT	charact	1	Year Verified Secondary MOS
VERIF_SMOS	charact	2	Verification Indicator for Secondary MOS

RELIGION			Religious preference codes.
CODE	charact	2	SIDPERS code
NAME	charact	26	Individual Soldier's Name

SCTYSTATS			Contains the codes for security clearance investigation status
CODE	charact	1	SIDPERS code
TEXT	charact	20	Description

SEPRATS			Temporary table used in "canned query" for separate rations
BATTERY	charact	3	A,B,C,HHB,SVC
CARD_DT	charact	6	Date of mealcard
GRADE	charact	2	Pay Grade
MEALCARD	charact	8	Mealcard Number
NAME	charact	27	Individual Soldier's Name
PLAN	text	10	Planned personnel status
POS	charact	4	SIDPERS position code
POS_TITLE	text	20	Position title
SSN	text	9	Social Security Number
STATUS	text	10	Current personnel status
UNIT	text	10	Unit name from OMTOE table

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SERVICE			Contains those fields in the soldier record that relate to the service as a whol
ACTIVE_SERV	charact	6	Basic Active Service Date
COMBAT_AREA	charact	6	Area of Last Combat Tour
DAYS_LEAVE	charact	4	Number of Days Leave
ETS_DATE	charact	1	Expiration Term of Service
FORGN_SERV	charact	2	Area of Last Foreign Service
LAST_COMBAT	charact	6	Year and Month – Last Combat
LAST_ER	charact	6	Year and Month – Last Efficiency Rating
NAME	charact	27	Individual Soldier's Name
PAY_ENTRY	charact	6	Pay Entry Basic Date (PEBD)
PHOTO_SUSP	charact	6	Year and Month of Photograph Suspense
RATER1	charact	6	Name of first EER or OER rater
RATER2	charact	9	Name of second EER or OER rater
RATER3	charact	9	Name of third EER or OER rater
RATER_DATE	charact	9	Effective Date of Rating
RET_OS	integer	1	Date Returned from Overseas
SSN	charact	9	Social Security Number
TERM_SERV	charact	6	Term of Service
SIDPERS			Contains all the fields exactly as they are on the SIDPERS SPF file.
ACTIVE_SERV	charact	6	Basic Active Service Date
AEA	charact	1	
AEA_TERM	charact	6	
ARRIVE_DATE1	charact	6	
ARRIVE_DATE2	charact	6	
ASI	charact	2	Additional Skill Identifier
ASSGN	charact	1	
ATTCH	charact	1	Flag to indicate attached or detached status
AWOL	charact	1	
BONUS_DT	charact	6	
BONUS_MOS	charact	3	Reenlistment Bonus MOS
CITIZEN	charact	1	Citizenship Status
CIV_EDUC	charact	1	Civilian Education
CMD_DEP	integer	1	
COMBAT_AREA	charact	1	Area of Last Combat Tour
CONUS_PREF	charact	2	
CUR_PROMO_DT	charact	4	Current Promotion Date

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
CUR_PROMO_PT	integer	2	Current Promotion Pts
DASI	charact	2	Duty Additional Skill Identifier
DATE_LOSS	charact	6	Anticipated Date of Loss
DELAY_SEP	charact	1	
DELCODE	charact	1	
DEPART_DATE1	charact	6	
DEPART_DATE2	charact	6	
DEPENDENTS	integer	1	Number of Dependents
DMOS	charact	5	Duty MOS
DOB	charact	6	Date of Birth
DOR	charact	6	Date of Rank
DUAL_SERV_GR	charact	4	
DUAL_SERV_ST	charact	1	
DUTY_DATE	charact	6	
DUTY_LANG	charact	2	
DUTY_STATUS	charact	3	
EER_SEER	charact	1	
ELIG_FHA	charact	1	
ELIG_MEDAL	charact	6	
ELIG_REEN	charact	2	
ELIG_RET_OS	charact	6	
ENLIST_BONUS	charact	1	
ETHNIC	charact	1	Ethnic Group Designator
ETS_DATE	charact	6	Expiration Term of Service
FORGN_SERV	charact	1	Area of Last Foreign Service
GOOD_CONDUCT	charact	6	
GRADE	charact	4	Pay Grade
GTA_SCORE	integer	2	
INCENT_PAY1	charact	5	
INCENT_PAY2	charact	5	
LANG1	charact	2	
LANG2	charact	2	
LAST_COMBAT	charact	6	Year and Month - Last Combat
LAST_ER	charact	6	Year and Month - Last Efficiency Rating
LAST_PCS	charact	6	
LAST_PERS_DT	charact	6	
LAST_PERS_TP	charact	4	
LAST_XACT_DT	charact	6	
LAST_XACT_TP	charact	4	
LEAVE1	integer	2	
LEAVE2	integer	2	
LOCAL	charact	40	

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
MARITAL	charact	1	Marital Status
MIL_EDUC	charact	1	NCO Graduate/Military Education Level
MOS	charact	5	Military Occupational Specialty Code
MOVE_DESIG1	charact	2	
MOVE_DESIG2	charact	2	
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
NON_CMD_DEP	integer	1	
OJT_DT	charact	6	Year and Month of OJT Completion
OS_PREF1	charact	2	
OS_PREF2	charact	2	
OS_PREF3	charact	2	
PAY_ENTRY	charact	6	Pay Entry Basic Date (PEBD)
PERCENTILE	integer	1	
PGM_PROCURE	charact	2	
PHOTO_SUSP	charact	6	Year and Month of Photograph Suspense
PHYS_CATEG	charact	1	Physical Category Code
POSITION1	charact	4	
POSITION2	charact	4	
POTNTL_UPC1	charact	5	
POTNTL_UPC2	charact	5	
PRE_PROMO_DT	charact	4	
PRE_PROMO_PT	integer	2	
PRIV_DISPUTE	charact	1	Privacy Dispute Flag
PROFIC_PAY	charact	1	
PROMO_IND	charact	1	Promotion Indicator
PROMO_MOS	charact	4	
PULHES	charact	6	Physical Profile
RACE	charact	1	Race
REG_BR	charact	2	Regimental Branch
REG_HOME	charact	2	Regimental Home
REG_NO	charact	4	Regimental Number
RELIGION	charact	2	Religion
REPORT_DATE1	charact	6	
REPORT_DATE2	charact	6	
RET_OS	charact	6	Date Returned from Overseas
RSC	charact	1	
SASI	charact	2	Secondary Additional Skill Identifier
SCTY_CLNC	charact	1	Security Clearance
SCTY_STATUS	charact	1	Status of Security Clearance
SEP_PGM	charact	3	
SERVICE_COMP	charact	1	

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SEX	charact	1	Sex
SMOS	charact	5	Secondary MOS
SPEC_PAY1	charact	5	
SPEC_PAY2	charact	5	
SQT_CODE	charact	1	
SQT_DT1	charact	6	
SQT_DT2	charact	6	
SQT_MOS	charact	4	
SQT_SCORE	integer	2	Skill Qualification Test Score
SSN	text	9	Social Security Number
SUSP_FAVOR	charact	1	
TDY1	integer	2	
TDY2	integer	2	
TERM_SERV	charact	1	Term of Service
ULTIMAT_UPC1	charact	5	
UPC1	charact	5	
UPC2	charact	5	
VERIF_DT	charact	6	Year Verified Secondary MOS
VERIF_SMOS	charact	1	Verification Indicator for Secondary MOS
VSSSN	charact	1	

SKILLINVTRY			Temporary table used by the report Skill_invtry.
ASGD	integer	2	Count of assigned personnel for this grade and MOS
AUTH	float	4	Count of authorized for this grade and MOS
GRADE	charact	2	Pay Grade
MOS	charact	5	Military Occupational Specialty Code
RQD	float	4	Count of required for this grade and MOS
SEQNO	integer	2	Flag for break in report

SOLDIER			Individual soldier record.
ACTIVE_SERV	charact	6	Basic Active Service Date
ARRIVE_DATE	charact	6	Date Arrived at Post
ASI	charact	2	Additional Skill Identifier
ATTCH	charact	1	Flag to indicate attached or detached status
BATTLE_POS	charact	4	Position in Wartime
BONUS_DATE	charact	6	Date bonus awarded
BONUS_MOS	charact	3	Reenlistment Bonus MOS
CITIZEN	charact	6	Citizenship Status

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
CIV_EDUC	charact	10	Civilian Education
COMBAT_AREA	charact	10	Area of Last Combat Tour
CUR_PROMO_DT	charact	4	Current Promotion Date
CUR_PROMO_PT	integer	2	Current Promotion Pts
DASI	charact	2	Duty Additional Skill Identifier
DATE_LOSS	charact	6	Anticipated Date of Loss
DAYS_LEAVE	float	4	Number of Days Leave
DEPART_DATE	charact	6	Actual Date of Departure
DEPENDENTS	integer	1	Number of Dependents
DMOS	charact	5	Duty MOS
DOB	charact	6	Date of Birth
DOR	charact	6	Date of Rank
ETHNIC	charact	5	Ethnic Group Designator
ETS_DATE	charact	6	Expiration Term of Service
FORGN_SERV	charact	10	Area of Last Foreign Service
GRADE	charact	2	Pay Grade
GT_SCORE	integer	2	General Technical Aptitude Score
HOR	charact	15	Home of record
INCENT_PAY	charact	5	Incentive Pay for Special Duty
LANG	charact	10	Language Identifier
LAST_COMBAT	charact	6	Year and Month – Last Combat
LAST_ER	charact	6	Year and Month – Last Efficiency Rating
MARITAL	charact	1	Marital Status
MEALCARD	charact	8	Mealcard Number
MEALCARD_DT	charact	6	Date Mealcard Issued
MIL_EDUC	charact	10	NCO Graduate/Military Education Level
MOS	charact	5	Military Occupational Specialty Code
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
NEWUPC	charact	5	UPC of receiving unit if soldier is detached
OJT_DT	charact	6	Year and Month of OJT Completion
OLDUPC	charact	5	UPC of sending unit if soldier is attached
ORGANIC	charact	1	Indicator if soldier is an SD gain
PAY_ENTRY	charact	6	Pay Entry Basic Date (PEBD)
PHOTO_SUSP	charact	6	Year and Month of Photograph Suspense
PHYS_CATEG	charact	1	Physical Category Code
POSITION	charact	4	Duty Position
PRIV_DISPUTE	charact	1	Indicator that there was a privacy dispute
PROMO_IND	charact	1	Promotion Indicator
PULHES	charact	6	Physical Profile
RACE	charact	1	Race
RANK	charact	4	Rank

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
RATER1	charact	16	Name of first EER or OER rater
RATER2	charact	16	Name of second EER or OER rater
RATER3	charact	16	Name of third EER or OER rater
RATER_DATE	charact	6	Effective Date of Rating
REG_BR	charact	2	Regimental Branch
REG_HOME	charact	10	Regimental Home
REG_NO	charact	4	Regimental Number
RELIGION	charact	26	Religion
REPORT_DATE	charact	6	Date Assigned to this Unit
RET_OS	charact	6	Date Returned from Overseas
SASI	charact	2	Secondary Additional Skill Identifier
SCTY_CLNC	charact	2	Security Clearance
SCTY_STATUS	charact	4	Status of Security Clearance
SEP_RATIONS	charact	1	Flag to indicate separate rations
SEX	charact	1	Sex
SMOS	charact	5	Secondary MOS
SPEC_PAY	charact	5	Pay for special duty
SQT_DATE	charact	6	Date of SQT test
SQT_SCORE	integer	2	Skill Qualification Test Score
SSN	text	9	Social Security Number
SUSP_FAVOR	charact	1	Suspension of favorable action flag
TERM_SERV	integer	1	Term of Service
TF_BADGE	charact	5	TACFIRE Badge Number
UNIT	charact	10	Unit name from OMTOE table
UPC	charact	5	Unit Processing Code (UIC)
VERIF_DT	charact	6	Year Verified Secondary MOS
VERIF_SMOS	charact	1	Verification Indicator for Secondary MOS

SOLDIERDD			Dictionary for the fields in the SOLDIER table.
BNPERSONN	charact	9	Flag to indicate field is in Battalion Roster report
DAILYSTATUS	charact	11	Flag to indicate field is in Daily Status report
DESC	charact	40	Description of field
FORM	charact	12	Name of form that contains this field
NAME	charact	12	Individual Soldier's Name
SKILLINV	charact	8	Flag to indicate field is in Skill inventory report
UNITMAN	charact	7	Flag to indicate field is in Unit Manning report

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SONAMEX			Index on table "soldier".
NAME	charact	27	Individual Soldier's Name
TIDP	integer	4	
SOPOSX			Index on position in the table "soldier"
POSITION	charact	4	Duty Position
TIDP	integer	4	
SORTMPC			Assigns non-alpha sort code to Military Position Codes - O,W,E .
NAME	charact	8	
SEQUENCE	integer	2	
VALUE	charact	1	
SOSSNX			Index on ssn for the table "soldier"
SSN	text	9	Social Security Number
TIDP	integer	4	
SPECIAL			Contains soldiers with special or derrogatory conditions
COMMENT	charact	20	Additional comments
CONDITION	charact	15	Special condition or pending unfavorable action
DATE	charact	6	Date that special condition took effect
NAME	charact	27	Individual Soldier's Name
SSN	text	9	Social Security Number
STATCODES			Personnel status codes
CATEGORY	charact	20	Category of status (major heading)
CATSEQ	charact	1	Sequence of category
DEPLOY	charact	1	Deployability of this status
STATSEQ	integer	2	Sequence of this status on report

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
STATUS	charact	12	Daily Personnel Status code

STATSSNX			Index on ssn for the table "status"
SSN	text	9	Social Security Number
TIDP	integer	4	

STATUS			Daily status of each soldier.
ACTUAL_BEGIN	date	12	Beginning date of current status
ACTUAL_END	date	12	End date of current status
CURR_STATUS	charact	11	Current status
LOCATION	charact	10	Location of soldier if absent from duty
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
PLAN_BEGIN	date	12	Begin date for planned status
PLAN_END	date	12	End date for planned status
PLAN_STATUS	charact	11	Place to enter a future status when it is known in advance
REASON	charact	15	If applicable, reason soldier has a particular status
SSN	text	9	Social Security Number
UPC	charact	5	Unit Processing Code (UIC)

TRANSIENT			Codes for transient personnel used primarily by report Unit_manning.
POS	charact	5	SIDPERS position code
POS_TITLE	charact	20	Title of position

UMR			Temporary table used by report unit_manning.
ARRIVE_DATE	text	6	Date Arrived at Post
ASI	charact	2	Additional Skill Identifier
AUTH_GRADE	charact	2	Authorized grade
AUTH_MOS	charact	5	Authorized MOS
BATTERY	charact	3	Battery name
BATTERYSEQ	integer	2	Sort sequence for battery
DEPART_DATE	text	6	Actual Date of Departure

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
DEPLOY	text	1	Deployability of this individual
DMOS	charact	5	Duty MOS
ENLIST_ASG	integer	2	Flag to indicate enlisted and assigned
ENLIST_AUT	integer	2	Flag to indicate enlisted and authorized
ETS_DATE	text	6	Expiration Term of Service
GRADE	charact	2	Pay Grade
LOSS_DATE	text	6	Expected date of loss
MOS	charact	5	Military Occupational Specialty Code
MPC	charact	1	Military Personnel Class
NAME	charact	27	Individual Soldier's Name
OFFICER_ASG	integer	2	Flag to indicate officer and assigned
OFFICER_AUT	integer	2	Flag to indicate officer and authorized
POS	charact	4	SIDPERS position code
POS_FILLED	integer	2	Flag to indicate if position is assigned
POS_TITLE	charact	24	Title for this position
RANK_DATE	text	6	Date of rank
REPORT_DATE	text	6	Date Assigned to this Unit
SCTY_CLNC	charact	2	Security Clearance
SMOS	charact	5	Secondary MOS
SSN	charact	9	Social Security Number
SSN	text	9	Social Security Number
STATUS	text	3	Daily personnel status
STATUS	text	11	Daily personnel status
UNITSEQ	integer	2	Sequence number of unit
UNIT_NAME	charact	30	Name of section
UPC	charact	5	Unit Processing Code (UIC)
WARRANT_ASG	integer	2	Flag to indicate warrant and assigned
WARRANT_AUT	integer	2	Flag to indicate warrant and authorized

UNITDATA			Contains those fields in the soldier record relating to his current unit.
ARRIVE_DATE	charact	6	Date Arrived at Post
BATTLE_POS	charact	4	Position in Wartime
DATE_LOSS	charact	6	Anticipated Date of Loss
DEPART_DATE	charact	5	Actual Date of Departure
MEALCARD	integer	4	Mealcard Number
MEALCARD_DT	integer	4	Date Mealcard Issued
NAME	charact	27	Individual Soldier's Name
PAYROLL_NO	integer	2	
POSITION	charact	6	Duty Position

PERSONNEL APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
REG_BR	charact	4	Regimental Branch
REG_HOME	charact	2	Regimental Home
REG_NO	integer	2	Regimental Number
REPORT_DATE	charact	6	Date Assigned to this Unit
SSN	charact	9	Social Security Number
TF_BADGE	charact	6	TACFIRE Badge Number
UPC	charact	5	Unit Processing Code (UIC)

UNITS			Unit names down to the section level
CDR_POS	charact	1	commander's position - unused
NAME	charact	30	Individual Soldier's Name
PARA	integer	2	Paragraph of unit from MTO&E
PARENT	charact	10	Unit name of next echelon up
SUBUNIT	charact	2	First two characters of SIDPERS position code - unused
UNIT	charact	10	Unit name from OMTOE table
UNITCODE	charact	8	
UPC	charact	5	Unit Processing Code (UIC)

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
ARTEP			ARTEP codes and titles.
ARTEP	text	7	ARTEP category of training.
TITLE	text	50	
EVENT			Time, location, subject and participants of scheduled training events.
ARTEP	text	7	ARTEP category of training.
BATTERY	text	3	Battery - HHB, A, B, C, SVC.
BEGIN_DATE	date	12	Beginning date of training event.
BEGIN_TIME	text	4	Beginning time of training event in 24 hour format - i.e., 1430.
COMMENTS	text	210	Special conditions of note.
DESCRIPTION	text	50	Brief summary.
END_DATE	date	12	Ending date of a training event. Currently not used.
END_TIME	text	4	Ending time of a training event in 24 hour format - i.e., 1430.
EVENT	text	14	Event identification code indicating type of training, scheduler and sequence.
INSTRUCTOR	text	30	Instructor(s) of tasks to be trained. Either name or position is used.
LOCATION	text	20	Building number or area name.
PARTICIPANTS	text	20	Brief indication of level of participation - i.e. ALL, BTY(-), SEL PERS.
REFS	text	12	Reference document number from which training guidelines were obtained.
SCHEDULER	text	12	INGRES username of individual who added the event to the schedule.
STATUS	text	6	Codes reflecting updates to the authorized schedule - ADDED, CANCEL, RESCHD.
SUBEVENT	text	1	Alpha character indicating an event attached to a "main" event.
TYPE	text	20	Type of training - i.e., PE (Practical Excercise), Lecture.
UNIFORM	text	12	Type of uniform to be worn - i.e FIELD, DUTY, PT.

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
EVENTSOLDIER			Identifies individual soldiers to be trained in a scheduled training event.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
MOS	text	5	Military Occupational Specialty Code..
NAME	text	27	
SSN	text	9	Social Security Number.
TASK	text	12	Task Code..
UNIT	text	10	Unit name from OMTOE table.
EVENTSUMMARY			This view is used by report Event.
ARTEP	text	7	ARTEP category of training.
BATTERY	text	3	Battery Code - HHB, A, B, C, SVC.
BEGIN_DATE	date	12	Beginning date of training event.
BEGIN_TIME	text	5	Beginning time of training event in 24 hour format - i.e., 1430.
COMMENTS	text	210	Special conditions of note.
DESCRIPTION	text	40	Brief summary.
END_DATE	date	12	Ending date of a training event. Currently not used.
END_TIME	text	5	Ending time of a training event in 24 hour format - i.e., 1430.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
INSTRUCTOR	text	30	Instructor(s) of tasks to be trained. Either name or position is used.
LOCATION	text	20	Building number or area name.
MISSION	text	8	Mission Code.
PARTICIPANTS	text	20	Brief indication of level of participation - i.e. ALL, BTY(-), SEL PERS.
REFS	text	12	Reference document number from which training guidelines were obtained.
TASK	text	12	Task Code.
TITLE	text	120	
TYPE	text	20	Type of training - i.e., PE (Practical Excercise), Lecture.
UNIFORM	text	12	Type of uniform to be worn - i.e FIELD, DUTY, PT.
UNIT	text	10	Unit name from OMTOE table.

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
EVENTTASK			This table identifies the tasks to be trained in a scheduled training event.
ARTEP	text	7	ARTEP category of training.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
MISSION	text	8	Mission Code.
TASK	text	12	Task Code.
UNIT	text	10	Unit name from OMTOE table.
EVENTUNIT			This table identifies the units participating in a scheduled training event.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
TASK	text	12	Task Code.
UNIT	text	10	Unit name from OMTOE table.
UNITCODE	text	8	Unique identifier for unit .
MISSION			Missions for which units must be trained.
ARTEP	text	7	ARTEP category of training.
MISSION	text	8	Mission Code.
TITLE	text	50	
UNIT	text	11	Unit name from OMTOE table.
WEIGHT	integer	2	Scaling factor indicating importance of mission.
MOSSCORE			This view is used by the MOS Score Reports.
DATE	date	12	
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
FAIL	integer	2	Number of fails recorded for a given task.
MOS	text	8	Military Occupational Specialty Code.
NOTEVAL	integer	2	Number of not Evaluateds for a task.
PASS	integer	2	Number of passes recorded for a task.
SSN	text	9	Social Security Number.
TASK	text	12	Task Code.

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UPC	charact	5	Unit position code.
MOSSCORE2			View used by report Mosscore2.
DATE	date	12	
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
FAIL	integer	2	Number of fails recorded for a task.
MOS	text	8	Military Occupational Specialty Code.
NOTEVAL	integer	2	Number of not Evaluateds recorded for a task.
PASS	integer	2	Number of passes recorded for a task.
SSN	text	9	Social Security Number.
TASK	text	12	Task Code.
UNIT	charact	10	Unit name from OMTOE table.
UPC	charact	5	Unit position code.
PTQUALV			View of table TTPTQUAL which automatically calculates pass/fail using score data
AGE	float	8	
BATTERY	charact	3	Battery Code - HHB, A, B, C, SVC.
CONDITION	charact	6	
DATE	date	12	
HEIGHT	float	4	
NAME	charact	27	
NEXTDT	date	12	Date of next test.
PF	text	7	
PUSHUPS_PTS	integer	2	
RAW_PUSHUPS	integer	2	
RAW_RUN	charact	6	
RAW_SITUPS	integer	2	
RMKS	charact	25	
RUN_PTS	integer	2	
SITUPS_PTS	integer	2	
SSN	charact	9	Social Security Number.
TEMP	integer	2	
TOT_PTS	integer	2	
UNIT	charact	10	Unit name from OMTOE table.
WEIGHT	integer	2	

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SCHEDULE2			Temporary table used by report Schedule2, the detailed training schedule.

Table/Field	Type	Size	Table/Field Contents
ARTEP	text	7	ARTEP category of training.
BATTERY	text	3	Battery Code - HHB, A, B, C, SVC.
BEGIN_DATE	date	12	Beginning date of training event.
BEGIN_TIME	text	4	Beginning time of training event in 24 hour format - i.e., 1430.
COMMENTS	text	210	Special conditions of note.
DESCRIPTION	text	50	Brief summary.
END_DATE	date	12	Ending date of a training event. Currently not used.
END_TIME	text	4	Ending time of a training event in 24 hour format - i.e., 1430.
EVENT	text	14	Event identification code indicating type of training, scheduler and sequence.
INSTRUCTOR	text	30	Instructor(s) of tasks to be trained. Either name or position is used.
LOCATION	text	20	Building number or area name.
PARTICIPANTS	text	20	Brief indication of level of participation - i.e. ALL, BTY(-), SEL PERS.
REFS	text	12	Reference document number from which training guidelines were obtained.
SCHEDULER	text	12	INGRES username of individual who added the event to the schedule.
STATUS	text	6	Codes reflecting updates to the authorized schedule - ADDED, CANCEL, RESCHD.
SUBEVENT	text	1	Alpha character indicating an event attached to a "main" event.
TASK	text	12	Task Code.
TYPE	text	20	Type of training - i.e., PE (Practical Excercise), Lecture.
UNIFORM	text	12	Type of uniform to be worn - i.e FIELD, DUTY, PT.

Table/Field	Type	Size	Table/Field Contents
SCHEDULER			Initials of training event scheduler and count of events scheduled.

Table/Field	Type	Size	Table/Field Contents
ID	text	3	Initials of training event scheduler.
SEQ	integer	2	Number of events created by this scheduler used to maintain a sequence counter.
SSN	text	9	Social Security Number.

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SOLDIERSCORE			Common skills and MOS training scores.
DATE	date	12	Date training occurred.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
MOS	text	8	Military Occupational Specialty Code.
SSN	text	9	Social Security Number.
STATUS	text	1	P=Pass, F=Fail, N=Not Evaluated.
TASK	text	12	Task Code.
TASK			Code and title of all tasks, collective and individual.
ARTEP	text	7	ARTEP category of training.
COMMENTS	text	200	Special conditions of note.
DECAY	date	12	Length of time in which skill decays.
MISSION	text	8	Mission Code.
RETRAIN	date	12	Time required to re-train decayed skills.
TASK	text	12	Task Code.
TITLE	text	120	
TRAIN	date	12	Length of time required for initial training.
WEIGHT	integer	2	Importance of this task to the mission of which it is a part.
TASKSUMMARY			View used by report Tasksummary.
ARTEP	text	7	ARTEP category of training.
ATITLE	text	50	ARTEP title.
MISSION	text	8	Mission Code.
MTITLE	text	50	Mission title.
TASK	text	12	Task Code.
TTITLE	text	120	Task title.
TTPTQUAL			PT qualification data.
BATTERY	charact	3	Battery Code - HHB, A, B, C, SVC.
CONDITION	charact	6	Weather conditions at time of PT.
DATE	date	12	Date of PT qualification test.
DOB	charact	6	Date of birth.

Table/Field	Type	Size	Table/Field Contents
HEIGHT	float	4	
NAME	charact	27	
PUSHUPS_PTS	integer	2	
RAW_PUSHUPS	integer	2	
RAW_RUN	charact	6	
RAW_SITUPS	integer	2	
RMKS	charact	25	
RUN_PTS	integer	2	
SITUPS_PTS	integer	2	
SSN	charact	9	Social Security Number.
SSN	text	9	Social Security Number.
TEMP	integer	2	
UNIT	charact	10	Unit name from OMTOE table.
WEIGHT	integer	2	

TTWEAPONQUAL			Weapons qualification data.
BATTERY	charact	3	Battery Code - HHB, A, B, C, SVC.
CAL45CLASS	charact	1	Marksman, Sharpshooter, Expert.
CAL45DATE	date	12	Date of .45 caliber pistol test.
CAL45SCORE	charact	4	Score for .45 caliber pistol test.
CAL50CLASS	charact	1	Marksman, Sharpshooter, Expert.
CAL50DATE	date	12	Date of .50 caliber machine gun test.
CAL50SCORE	charact	4	Score for .50 caliber machine gun test.
M16A1CLASS	charact	1	Marksman, Sharpshooter, Expert.
M16A1DATE	date	12	Date of M16 test.
M16A1SCORE	charact	4	Score for M16 test.
M203CLASS	charact	1	Marksman, Sharpshooter, Expert.
M203DATE	date	12	Date of M203 test.
M203SCORE	charact	4	Score for M203 test.
M60CLASS	charact	1	Marksman, Sharpshooter, Expert.
M60DATE	date	12	Date of M60 test.
M60SCORE	charact	4	Score for M60 test.
NAME	charact	27	Name of soldier.
SSN	charact	9	Social Security Number.
UNIT	charact	10	Unit name from OMTOE table.

TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UNITSCORE			Scores of collective task training.
ARTEP	text	7	ARTEP category of training.
DATE	date	12	Date training occurred.
EVENT	text	14	Event identification code indicating type of training, scheduler and sequence.
MISSION	text	8	Mission Code.
STATUS	text	2	TR=Trained, NT=Not Trained, NP=Need Practice.
TASK	text	12	Task Code.
UNIT	text	10	Unit name from OMTOE table.
XARTEPARTEP			Index on table "artep".
ARTEP	text	7	ARTEP category of training.
TIDP	integer	4	Index pointer - for internal use only.
XEVENT1			Index on table "event".
BEGIN_DATE	date	12	Beginning date of training event.
TIDP	integer	4	Index pointer - for internal use only.
XEVSOLD1			Index on table "eventsoldier".
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
SSN	text	9	Social Security Number.
TIDP	integer	4	Index pointer - for internal use only.
XEVTASK1			Index on table "eventtask".
ARTEP	text	7	ARTEP category of training.
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
TASK	text	12	Task Code.
TIDP	integer	4	Index pointer - for internal use only.

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TRAINING APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
XEVUNIT1			Index on table "eventunit".
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
TIDP	integer	4	Index pointer - for internal use only.
UNIT	text	10	Unit name from OMTOE table.
XSOSCORE1			Index on table "soldierscore".
EVENT	text	20	Event identification code indicating type of training, scheduler and sequence.
TIDP	integer	4	Index pointer - for internal use only.
XSOSCORE2			Index on table SOLDIERSCORE.
DATE	date	12	
TIDP	integer	4	Index pointer - for internal use only.
XSOSCORE3			Index on table "soldierscore".
SSN	text	9	Social Security Number.
TIDP	integer	4	Index pointer - for internal use only.
XTASK1			Index on table "task".
TASK	text	12	Task Code.
TIDP	integer	4	Index pointer - for internal use only.
XUNSCORE1			Index on table "unitscore".
EVENT	text	14	Event identification code indicating type of training, scheduler and sequence.
TIDP	integer	4	Index pointer - for internal use only.

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
B2MAGJ			Contents of original tapes from DLOGS.
LINE	charact	6	Line Item Number.
PBAC	charact	1	
PBIC	charact	1	
PROC_CODE	charact	1	
SERIAL_NO	charact	10	
STOCK_NO	charact	15	National Stock Number.
SUBLINE	charact	6	
UIC	charact	5	Unit Identification Code.
UNIT_ISSUE	charact	2	
E3WAGJ			Contains data from original DLOGS tapes.
CAT_CODE	charact	2	
LINE	charact	6	Line Item Number.
NOMENCLATURE	charact	22	
PBAC	charact	1	
PBIC	charact	1	
PROC_CODE	charact	1	
STOCK_NO	charact	15	National Stock Number.
SUBLINE	charact	6	
UIC	charact	5	Unit Identification Code.
UNIT_ISSUE	charact	2	
EMTOE			Equipment portion of MTOE.
AUTH	integer	4	Authorized quantity.
AUTH_DOC	charact	14	Authorizing document.
CONTROL	charact	1	
DELTA_AUTH	integer	4	
DELTA_RQD	integer	4	
LINE	charact	6	Line Item Number.
NEW_DATE	charact	6	
NEW_LINE	charact	6	
PARA	charact	3	
RICC	charact	1	
RMK	charact	3	
RQD	integer	4	
SELECT_CODE	charact	1	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UIC	charact	5	Unit Identification Code.
UNIT	charact	10	Unit name from Omtoe table

G3WAGJ			Contains data fromm original DLOGS tapes.
AUTH	float	4	Authorized quantity.
AUTH_DOC	charact	8	Authorizing document.
ERC	charact	1	
LAST_ACT_DT	charact	4	
LINE	charact	6	Line Item Number.
PBAC	charact	1	
PBIC	charact	1	
PROC_CODE	charact	1	
QTY_DUE	float	4	
QTY_ON_HAND	float	4	
RICC	charact	1	
RQD	float	4	
SERIAL_CODE	charact	1	
SPEC_DESIG	charact	1	
STOCK_NO	charact	14	National Stock Number.
SUBLINE	charact	6	
UIC	charact	5	Unit Identification Code.
UNIT_ISSUE	charact	2	
UNIT_PRICE	float	4	

HANDRPT			Temporary table used to generate Hand Receipt report.
AUTH	integer	4	
BUMPRACK	text	5	
CNT	integer	4	
DESC	text	62	
HANDREC	integer	2	
LIN	text	6	
NSN	text	13	
RQD	integer	4	
UIC	text	5	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
HOLDRPARAX			Index on table "loholder".
PARA	integer	2	
TIDP	integer	4	Index pointer - internal use only.
LOBNPLLRPT			Temporary table created for report "lobnpllrep".
AUTH	integer	4	Authorized quantity.
DATE_ESTAB	date	12	
DEAD	integer	2	
DESC	text	20	
DUE_QTY	integer	4	
NSN	text	13	National Stock Number.
ONHAND	integer	4	
PD	text	2	
RATIO	float	8	
REQD	integer	4	
ZEROBAL	integer	2	
LOCOMP			Logistics property components
CNSN	text	13	Components' National Stock Number.
DESC	text	60	Description.
MODEL	text	12	Model number.
PNSN	text	13	National Stock Number.
TYPE	text	4	COEI, BII, or AAL.
UI	text	2	Unit of issue.
LODOCREG			Logistics document register.
CLASS	integer	1	Item Class number.
COMPL_DT	date	12	Completion date.
COMPL_ST	text	4	Completion status.
DESC	text	20	Description.
DOCNO	integer	4	Document Serial number.
DODAAC	text	6	Department of Defense Activity Address Code.
DUE_QTY	integer	4	Quantity due in.
FOLLOWST	text	8	Follow-up status.
FOLLOWUP	date	12	Date of follow-up.

Table/Field	Type	Size	Table/Field Contents
INITIALS	text	3	Authorizing initials.
NSN	text	13	National Stock Number.
PD	text	2	Priority of Request.
RECD_TURN	integer	4	Quantity received or turned-in.
REMARK	text	20	Remarks.
RQUST_FOR	text	12	Requestor's Identification.
RQUST_QTY	integer	4	Quantity requested.
SENT_TO	text	3	Recipient Identification.
TIME	date	12	Date and time record was entered.

LOEXCESSPART			Logistics excess parts.
DESC	text	20	Description.
DT_COMPL	charact	4	Julian date completed.
DT_RECD	charact	4	Julian date received.
LOCATION	text	3	Location of parts.
NSN	text	13	National Stock Number.
ONHAND	integer	4	Quantity in excess.
RECD_FROM	text	3	Received from.
REMARK	text	40	Remarks.

LOHAND			Logistics hand receipt information
AUTH	integer	2	Authorized quantity.
BUMPRACK	text	6	Vehicle bumper number, or seq number for rack-stored items.
COMP	text	1	Is this item a component (Yes, or No).
FLAG314	text	1	Unused.
HANDREC	integer	2	Hand Receipt number.
LASTCHG	date	12	Unused.
LIN	text	6	Line Item Number.
NSN	text	13	National Stock Number.
ONHAND	integer	4	On Hand Quantity.
RLIN	text	6	Reportable Line Item Number - when an item is used as a substitute for another.
SEQNO	text	3	2406 sequence number: 01 to 99 with optional trailing alpha character.
SERIAL	text	12	Serial number.
SUBHAND	text	3	Unused.
UIC	text	5	Unit Identification Code.

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UNIT	text	10	Unit name from Omtoe table
USA	text	10	US Army regristration number

LOHANDRET — View of "lohand" with soldier name and item description included.

Table/Field	Type	Size	Table/Field Contents
AUTH	integer	2	Authorized quantity.
BUMPRACK	text	6	
COMP	text	1	
DESC	text	62	
FLAG314	text	1	
HANDREC	integer	2	
LASTCHG	date	12	
LIN	text	6	Line Item Number.
NAME	charact	27	
NSN	text	13	National Stock Number.
ONHAND	integer	4	
RLIN	text	6	
SEQNO	text	3	
SERIAL	text	12	
SSN	text	9	Social Security Number.
SUBHAND	text	3	
UIC	text	5	Unit Identification Code.
UNIT	text	10	Unit name from Omtoe table.
USA	text	8	

LOHOLDER — Logistics hand receipt holders.

Table/Field	Type	Size	Table/Field Contents
HANDREC	integer	2	Hand Receipt number.
PARA	integer	2	Paragraph (section).
SSN	text	9	Social Security Number.
UIC	text	5	Unit Identification Code.

LOLINE — Logistics line items

Table/Field	Type	Size	Table/Field Contents
CLASS	integer	1	Item Class number.
DESC	text	62	Description.
ECC	text	2	Meaning unknown.
ERC	text	1	Emergency Readiness Code.

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
LIN	text	6	Line Item Number.
MODEL	text	12	Model number.
OSI	text	1	O)rganization, S)tation, or I)nstallation.
UI	text	2	Unit of issue

LONSN			Logistics stock number information.
LIN	text	6	Line Item Number.
NSN	text	13	National Stock Number.
PRICE	float	4	Price of item.
SEC	text	1	Durability Code.
TM	text	30	Applicapable Technical Manual.

LOPLL			Logistics Prescribed Load List.
AUTH	integer	4	Authorized quantity.
DATE_ESTAB	date	12	Date Established.
NSN	text	13	National Stock Number.
ONHAND	integer	4	On Hand Quantity.
UIC	text	5	Unit Identification Code.

LOPLLDESC			Logistics Prescribed Load List descriptions.
DESC	text	20	Description.
NSN	text	13	National Stock Number.

LOPLLRPT			Temporary table created for report "lopllrep".
AUTH	integer	4	Authorized quantity.
DATE_ESTAB	date	12	
DESC	text	20	Description.
DOC_NO	text	14	
DOC_NO	text	19	
DUE_QTY	integer	4	
NSN	text	13	National Stock Number.
ONHAND	integer	4	
PD	text	2	
REQD	integer	4	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
UIC	text	5	Unit Identification Code.

LOREPAIR — Logistics vehicle repair history.

Table/Field	Type	Size	Table/Field Contents
ACTION	text	1	Repair action: O)rg shop, S)upply, R)epaired, X=support shop.
JOB	text	8	Job number (if any).
NSN	text	13	National Stock Number.
OCCUR	date	12	Date action was taken.
REMARK	text	40	Remarks.
REQ	text	8	Requisition number (if any).
SERIAL	text	12	Serial number.
STATUS	text	1	Status after action was taken: O)perational, L)imited op, N)on-operational.

LOSERVICE — Logistics vehicle service schedules.

Table/Field	Type	Size	Table/Field Contents
DUE	date	12	Date service is due (if any).
MAINT	text	1	Type of service to be performed (A, B, H, L, S... meanings unknown).
MHDUE	integer	4	Miles/Hours when service is due.
MHPERF	integer	4	Miles/Hours when service was performed.
MHUNITS	text	1	Miles/Hours when service is next due.
NSN	text	13	National Stock Number.
PERF	date	12	Date service was performed.
REMARK	text	40	Remarks.
SERIAL	text	12	Serial number.

T2406B — Temporary table containing data for the 2406 backside report.

Table/Field	Type	Size	Table/Field Contents
ACTCODE	text	1	Repair action code with the 'R's changed to 'Z's.
ACTION	text	1	Repair action code.
BUMPRACK	text	6	
D1	text	4	
D2	text	4	
D3	text	4	
DAT1	text	11	
DAT2	text	11	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
DAT3	text	11	
JOB	text	8	
MODEL	text	7	
MODEL	text	12	
NIINO	text	9	
NINO	text	13	
OCCUR	date	12	
OCCUR	text	25	
OD	date	12	
REMARK	text	40	
REQ	text	8	
SEQNO	text	3	
SERIAL	text	12	
STATUS	text	1	
TD1	text	11	
TD2	text	11	
TD3	text	11	
TUPLE	integer	4	
UIC	text	5	Unit Identification Code.

T2406F			Temporary table created for report lo2406f.
AD	integer	2	
AQ	integer	2	Authorized quantity.
DAY1	text	11	
DAY2	text	10	
DESC	text	62	
ECC	text	2	
ER	integer	2	
ERC	text	2	
ES	integer	2	
LIN	text	6	Line Item Number.
MODEL	text	12	
OH	integer	2	
OM	integer	2	
OS	integer	2	
PD	integer	2	
RD	integer	2	
RLIN	text	6	
RQ	integer	2	
SEQNO	text	3	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
SM	integer	2	
SS	integer	2	
TSEQ	text	3	

TBNROLL			Temporary table created for report "lobnroll".
AUTH	integer	2	Authorized quantity.
AUTH_DOC	text	14	Authorizing document.
DESC	text	72	
DUE	integer	2	
ERC	text	1	
LIN	text	6	Line Item Number.
MODEL	text	12	
NSN	text	13	National Stock Number.
ONHAND	integer	2	
PF	float	4	
PRICE	float	4	
REQ	integer	2	
RICC	text	1	
RLIN	charact	6	
UI	text	2	
UIC	charact	5	Unit Identification Code.

TLOPHAND			Temporary table created for report "lophand".
ACTION	text	1	Repair action code.
AUTH	integer	2	Authorized quantity.
BUMPRACK	text	6	
COMP	text	1	
DESC	text	124	
HANDREC	integer	2	
JOB	text	8	
LIN	text	6	Line Item Number.
MODEL	text	12	
NAME	text	27	
NSN	text	13	National Stock Number.
OCCUR	date	12	
ONHAND	integer	4	
REMARK	text	40	
REQ	text	8	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
RLIN	text	6	
SEC	text	1	
SEQNO	text	3	
SERIAL	text	12	
STATUS	text	1	
UI	text	2	
UIC	text	5	Unit Identification Code.
UNIT	text	10	Unit name from table "omtoe".
USA	text	8	

TLOPSTAT			Temporary table created for report lopstat.
ACTION	text	1	Repair action code.
BUMPRACK	text	6	
DESC	text	40	
DESC	text	48	
HANDREC	integer	2	
JOB	text	8	
LIN	text	6	Line Item Number.
MODEL	text	10	
MODEL	text	12	
NAME	text	27	
NSN	text	13	National Stock Number.
OCCUR	date	12	
ONHAND	integer	2	
ONHAND	integer	4	
REMARK	text	6	
REMARK	text	17	
REMARK	text	40	
REQ	text	2	
REQ	text	8	
RLIN	text	6	
SEQNO	text	3	
SERIAL	text	12	
STATUS	text	1	
TUPLE	integer	2	
UI	text	2	
UIC	text	5	Unit Identification Code.
USA	text	8	
USA	text	10	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
U2406F			Temporary intermediate table generated by the 2406 frontside report procedure.
ACTION	text	1	Repair action code.
NSN	text	13	National Stock Number.
OCCUR	date	12	
ODATE	date	12	
SACT	text	1	
SEQNO	text	3	
SERIAL	text	12	
SPTM	integer	2	
STATUS	text	1	
TOT	integer	2	
UBNROLL			Temporary intermediate table generated by the Batallion rollup report procedure.
RLIN	charact	6	
UIC	charact	5	Unit Identification Code.
ULOPSTAT			Temporary intermediate table generated by the Property Status report procedure.
ACTION	text	1	Repair action code.
JOB	text	8	
NSN	text	13	National Stock Number.
OCCUR	date	12	
REMARK	text	40	
REQ	text	8	
SERIAL	text	12	
STATUS	text	1	
TUPLE	integer	4	
V2406F			Temporary intermediate table generated by the 2406 frontside report procedure.
AD	integer	2	
OH	integer	2	
OM	integer	2	

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
OS	integer	2	
PD	integer	2	
RLIN	text	6	
SM	integer	2	
SS	integer	2	
TSEQ	text	3	

VEHTYPE			Translates vehicle codes to vehicle names.
ITEM	charact	10	
LINE	integer	2	
NATL_STOCK	charact	10	
PARA	integer	2	
QTY_ON_HAND	integer	2	
UNIT_PRICE	float	4	

WEAPTYPE			Translates weapon code to weapon name.
ITEM	charact	10	
LINE	integer	2	
NATL_STOCK	charact	10	
PARA	integer	2	
QTY_ON_HAND	integer	2	
UNIT_PRICE	float	4	

X1EMTOE			Index on table "emtoe".
LINE	charact	6	Line Item Number.
TIDP	integer	4	Index pointer - internal use only.
UIC	charact	5	Unit Identification Code.

X1LODOCREG			Index on table "lodocreg".
NSN	text	13	National Stock Number.
TIDP	integer	4	Index pointer - internal use only.

LOGISTICS APPLICATION DETAILED TABLE DICTIONARY

Table/Field	Type	Size	Table/Field Contents
X1LOHAND			?————————————————————
BUMPRACK	text	6	
TIDP	integer	4	Index pointer - internal use only.
UIC	text	5	Unit Identification Code.
X3LOHAND			Index on table "lohand".
HANDREC	integer	2	
TIDP	integer	4	Index pointer - internal use only.
UIC	text	5	Unit Identification Code.
X4LOHAND			Index on table "lohand".
RLIN	text	6	
TIDP	integer	4	Index pointer - internal use only.
X5LOHAND			Index on table "lohand".
SEQNO	text	3	
TIDP	integer	4	Index pointer - internal use only.

APPENDIX C

FIELD/TABLE CROSS REFERENCE

This table cross references every field in the database to the tables in which it occurs. It also indicates the declared size of each field.

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UTILITY FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ACCT	charact	9	USERS	
ACQ	charact	1	OMTOE	Fourth character of rank field
ACTCODE	text	1	T2406B	Repair action code with the 'R's changed to 'Z's
ACTION	text	1	LOREPAIR	Repair action: O)rg shop, S)upply, R)epaired, X=support shop.
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			U2406F	
			ULOPSTAT	
ACTIVE_SERV	charact	6	ASSIGNED	Basic Active Service Date
			SERVICE	
			SIDPERS	
			SOLDIER	
ACTUAL_BEGIN	date	12	STATUS	Beginning date of current status
ACTUAL_END	date	12	STATUS	End date of current status
AD	integer	2	T2406F	
			V2406F	
AEA	charact	1	SIDPERS	
AEA_TERM	charact	6	SIDPERS	
AGE	float	8	PTQUALV	
AQ	integer	2	T2406F	Authorized quantity

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ARRIVE_DATE	charact	6	ASSIGNED ATTACHED BNPERSONN SOLDIER UNITDATA	Date Arrived at Post
	text	6	UMR	
ARRIVE_DATE1	charact	6	SIDPERS	
ARRIVE_DATE2	charact	6	SIDPERS	
ARTEP	text	7	ARTEP EVENT EVENTSUMMARY EVENTTASK MISSION SCHEDULE2 TASK TASKSUMMARY UNITSCORE XARTEPARTEP XEVTASK1	ARTEP category of training.
ASGD	integer	2	SKILLINVTRY	Count of assigned personnel for this grade and MOS
ASI	charact	2	ASSIGNED ATTACHED OMTOE QUALS SIDPERS SOLDIER UMR	Additional Skill Identifier

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ASSGN	charact	1	SIDPERS	
ATITLE	text	50	TASKSUMMARY	
ATTCH	charact	1	BNPERSONN	Flag to indicate attached or detached status
			SIDPERS	
			SOLDIER	
AUTH	float	4	G3WAGJ	Authorized quantity
			OMTOE	
			SKILLINVTRY	
	integer	2	LOHAND	
			LOHANDRET	
			TBNROLL	
			TLOPHAND	
		4	EMTOE	
			HANDRPT	
			LOBNPLLRPT	
			LOPLL	
			LOPLLRPT	
AUTH_DOC	charact	8	G3WAGJ	Authorizing document
		14	EMTOE	
	text	14	TBNROLL	
AUTH_GRADE	charact	2	UMR	Authorized grade
AUTH_MOS	charact	5	UMR	Authorized MOS
AWOL	charact	1	SIDPERS	
BATTERY	charact	3	BATTERYCODES	
			SEPRATS	
			UMR	
			PTQUALV	
			TTPTQUAL	
			TTWEAPONQUAL	
	text	3	EVENT	
			EVENTSUMMARY	
			SCHEDULE2	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
BATTERYSEQ	integer	2	BATTERYCODES UMR	
BATTLE_POS	charact	4	ASSIGNED ATTACHED SOLDIER UNITDATA	Position in Wartime
BEGIN_DATE	date	12	EVENT EVENTSUMMARY SCHEDULE2 XEVENT1	Beginning date of training event.
BEGIN_TIME	text	4	EVENT	Beginning time of training event in 24 hour format - i.e. 1430.
			SCHEDULE2	
		5	EVENTSUMMARY	
BNPERSONN	charact	9	SOLDIERDD	Flag to indicate field is in Battalion Roster report
BONUS_DATE	charact	6	SOLDIER	Date bonus awarded
BONUS_DT	charact	6	SIDPERS	
BONUS_MOS	charact	3	ASSIGNED SIDPERS SOLDIER	Reenlistment Bonus MOS
		6	QUALS	
BRANCH	charact	2	OMTOE	Branch of Service
BUMPER	charact	10	DRIVERS	Bumper number of the vehicle he drives

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
BUMPRACK	text	5	HANDRPT	
		6	LOHAND	
			LOHANDRET	
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			X2LOHAND	
CAL45CLASS	charact	1	TTWEAPONQUAL	
CAL45DATE	date	12	TTWEAPONQUAL	
CAL45SCORE	charact	4	TTWEAPONQUAL	
CAL50CLASS	charact	1	TTWEAPONQUAL	
CAL50DATE	date	12	TTWEAPONQUAL	
CAL50SCORE	charact	4	TTWEAPONQUAL	
CARD_DT	charact	6	SEPRATS	Date of mealcard
CATEGORY	charact	20	DAILYRPT	
			DAILYSTATUS	
			STATCODES	
CATSEQ	charact	1	DAILYRPT	
			DAILYSTATUS	
			STATCODES	
CAT_CODE	charact	2	E3WAGJ	
CDR_POS	charact	1	UNITS	commander's position - unused

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
CITIZEN	charact	1	ASSIGNED	Citizenship Status
			PERSONAL	
			SIDPERS	
		6	SOLDIER	
CIV_EDUC	charact	1	QUALS	Civilian Education
			SIDPERS	
		10	ASSIGNED	
			SOLDIER	
CLASS	integer	1	LODOCREG	Item Class number
			LOLINE	
CMD_DEP	integer	1	SIDPERS	
CNSN	text	13	LOCOMP	Components' National Stock Number
CNT	integer	4	HANDRPT	
CNT_ATTCH	integer	2	BNPERSONN	Flag to indicate attached
CODE	charact	1	CIVEDCODES	SIDPERS code
			CLEARANCE	
			MILEDCODES	
			SCTYSTATS	
		2	RELIGION	
	integer	2	ATTFORMAT	
	text	7	EVENTUNIT	
COMBAT_AREA	charact	1	SIDPERS	Area of Last Combat Tour
		6	SERVICE	
		10	ASSIGNED	
			SOLDIER	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
COMMENT	charact	20	CONDITIONS SPECIAL	More description for this condition
COMMENTS	text	200	TASK	Special conditions of note.
		210	EVENT EVENTSUMMARY SCHEDULE2	
COMP	text	1	LOHAND LOHANDRET TLOPHAND	Is this item a component (Yes, or No)
COMPL_3180	date	12	PRP	Date DA form 3180 was completed
COMPL_DT	date	12	LODOCREG	Completion date
COMPL_ST	text	4	LODOCREG	Completion status
CONDITION	charact	6	PTQUALV TTPTQUAL	
		15	CONDITIONS SPECIAL	
CONTROL	charact	1	EMTOE	
CONUS_PREF	charact	2	SIDPERS	
CURR_STATUS	charact	11	STATUS	Current status
	text	11	BNPERSONN	
CUR_PROMO_DT	charact	4	ASSIGNED SIDPERS SOLDIER	Current Promotion Date
		10	QUALS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
CUR_PROMO_PT	charact	4	QUALS	Current Promotion Pts
	integer	2	ASSIGNED SIDPERS SOLDIER	
CUST	charact	1	PRP	Custodian (Y or N)
C_INIT_SCORE	integer	1	PRP	Custodian initial test score
C_INIT_TEST	date	12	PRP	Custodian initial test date
C_SEMI_SCORE	integer	1	PRP	Custodian semi-annual test score
C_SEMI_TEST	date	12	PRP	Custodian semi-annual test date
D1	text	4	T2406B	
D2	text	4	T2406B	
D3	text	4	T2406B	
DAILYSTATUS	charact	11	SOLDIERDD	Flag to indicate field is in Daily Status report
DASI	charact	2	ASSIGNED ATTACHED SIDPERS SOLDIER	Duty Additional Skill Identifier
		5	QUALS	
DAT1	text	11	T2406B	
DAT2	text	11	T2406B	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
DAT3	text	11	T2406B	
DATE	charact	6	SPECIAL	Date that special condition took effect
	date	12	MOSSCORE MOSSCORE2 PTQUALV SOLDIERSCORE TTPTQUAL UNITSCORE XSOSCORE2	
DATE_ESTAB	date	12	LOBNPLLRPT LOPLL LOPLLRPT	
DATE_LOSS	charact	6	ASSIGNED SIDPERS SOLDIER UNITDATA	Anticipated Date of Loss
DAY1	text	11	T2406F	
DAY2	text	10	T2406F	
DAYS_LEAVE	charact	4	SERVICE	Number of Days Leave
	float	4	SOLDIER	
	integer	2	ASSIGNED	
DEAD	integer	2	LOBNPLLRPT	
DECAY	date	12	TASK	Length of time in which skill decays.
DELAY_SEP	charact	1	SIDPERS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
DELCODE	charact	1	SIDPERS	
DELTA_AUTH	integer	4	EMTOE	
DELTA_RQD	integer	4	EMTOE	
DEPART_DATE	charact	5	UNITDATA	Actual Date of Departure
		6	ASSIGNED	
			ATTACHED	
			SOLDIER	
	text	6	UMR	
DEPART_DATE1	charact	6	SIDPERS	
DEPART_DATE2	charact	6	SIDPERS	
DEPENDENTS	charact	1	PERSONAL	Number of Dependents
	integer	1	ASSIGNED	
			SIDPERS	
			SOLDIER	
DEPLOY	charact	1	CONDITIONS	Deployability status for this condition
			STATCODES	
	text	1	UMR	
DESC	charact	40	SOLDIERDD	Description of field
	text	20	LOBNPLLRPT	
			LODOCREG	
			LOEXCESSPART	
			LOPLLDESC	
			LOPLLRPT	
		40	TLOPSTAT	
		48	TLOPSTAT	
		60	LOCOMP	
		62	HANDRPT	
			LOHANDRET	
			LOLINE	
			T2406F	
		72	TBNROLL	
		124	TLOPHAND	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
DESCRIPTION	text	40	EVENTSUMMARY	Brief summary.
		50	EVENT SCHEDULE2	
DMOS	charact	5	ASSIGNED ATTACHED SIDPERS SOLDIER UMR	Duty MOS
		10	QUALS	
DOB	charact	6	ASSIGNED ATTACHED PERSONAL SIDPERS SOLDIER TTPTQUAL	Date of Birth
DOCNO	integer	4	LODOCREG	Document Serial number
DOCSEQ	charact	1	BATTERYCODES	
DOC_NO	text	14	LOPLLRPT	
		19	LOPLLRPT	
DODAAC	text	6	LODOCREG	Department of Defense Activity Address Code
			BATTERYCODES	
DOR	charact	6	ASSIGNED ATTACHED BNPERSONN QUALS SIDPERS SOLDIER	Date of Rank

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
DRIV_POS	charact	10	DRIVERS	Assistant or primary driver
DT_COMPL	charact	4	LOEXCESSPART	Julian date completed
DT_RECD	charact	4	LOEXCESSPART	Julian date received
DUAL_SERV_GR	charact	4	SIDPERS	
DUAL_SERV_ST	charact	1	SIDPERS	
DUE	date	12	LOSERVICE	Date service is due (if any)
	integer	2	TBNROLL	
DUE_QTY	integer	4	LOBNPLLRPT	
			LODOCREG	
			LOPLLRPT	
DUTY_DATE	charact	6	SIDPERS	
DUTY_LANG	charact	2	SIDPERS	
DUTY_STATUS	charact	3	SIDPERS	
ECC	text	2	LOLINE	meaning unknown
			T2406F	
ED_EVAC	date	12	PRP	Emergency Destruction and Evacuation (date)
EER_SEER	charact	1	SIDPERS	
ELIG_FHA	charact	1	SIDPERS	
ELIG_MEDAL	charact	6	SIDPERS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ELIG_REEN	charact	2	SIDPERS	
ELIG_RET_OS	charact	6	SIDPERS	
END_DATE	date	12	EVENT	Ending date of a training event. Currently not used.
			EVENTSUMMARY SCHEDULE2	
END_TIME	text	4	EVENT	Ending time of a training event in 24 hour format - i.e. 1430.
			SCHEDULE2	
		5	EVENTSUMMARY	
ENLIST	integer	2	BNPERSONN	Flag to indicate enlisted
ENLIST_ASG	integer	2	UMR	Flag to indicate enlisted and assigned
ENLIST_AUT	integer	2	UMR	Flag to indicate enlisted and authorized
ENLIST_BONUS	charact	1	SIDPERS	
ER	integer	2	T2406F	
ERC	charact	1	G3WAGJ	
	text	1	LOLINE TBNROLL	
		2	T2406F	
ES	integer	2	T2406F	
ETHNIC	charact	1	SIDPERS	Ethnic Group Designator
		5	ASSIGNED PERSONAL SOLDIER	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ETS_DATE	charact	1	SERVICE	Expiration Term of Service
		6	ASSIGNED	
			GTRPT	
			SIDPERS	
			SOLDIER	
	text	6	UMR	
EVENT	text	14	EVENT	Event identification code indicating type of training, scheduler and sequence.
			SCHEDULE2	
			UNITSCORE	
			XUNSCORE1	
		20	EVENTSOLDIER	
			EVENTSUMMARY	
			EVENTTASK	
			EVENTUNIT	
			MOSSCORE	
			MOSSCORE2	
			SOLDIERSCORE	
			XEVSOLD1	
			XEVTASK1	
			XEVUNIT1	
			XSOSCORE1	
FAIL	integer	2	MOSSCORE	Number of fails recorded for a given task.
			MOSSCORE2	
FLAG314	text	1	LOHAND	unused
			LOHANDRET	
FOLLOWST	text	8	LODOCREG	Followup status

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
FOLLOWUP	date	12	LODOCREG	Date of followup
FORGN_SERV	charact	1 2 10	SIDPERS SERVICE ASSIGNED SOLDIER	Area of Last Foreign Service
FORM	charact	12	SOLDIERDD	Name of form that contains this field
FORMAT	charact	9	ATTFORMAT	
GOOD_CONDUCT	charact	6	SIDPERS	
GRADE	charact	2 4	ASSIGNED ATTACHED BNPERSONN GRADES GTRPT OMTOE QUALS SEPRATS SKILLINVTRY SOLDIER UMR SIDPERS	Pay Grade
GTA_SCORE	integer	2	SIDPERS	
GT_SCORE	charact integer	6 2	QUALS ASSIGNED GTRPT SOLDIER	General Technical Aptitude Score
HANDREC	integer	2	HANDRPT LOHAND LOHANDRET LOHOLDER TLOPHAND TLOPSTAT X3LOHAND	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
HEIGHT	float	4	PTQUALV	
			TTPTQUAL	
	integer	2	TTPTQUAL	
HOR	charact	15	SOLDIER	Home of record
ID	text	3	SCHEDULER	Initials of training event scheduler.
INCENT_PAY	charact	5	SOLDIER	Incentive Pay for Special Duty
INCENT_PAY1	charact	5	SIDPERS	
INCENT_PAY2	charact	5	SIDPERS	
INITIALS	text	3	LODOCREG	Authorizing initials
INIT_3180	date	12	PRP	Date DA form 3180 was initiated
INIT_SCORE	integer	1	PRP	Score from Initial test
INIT_TEST	date	12	PRP	Date of initial test
INIT_TRNG	date	12	PRP	Date of initial training
INSTRUCTOR	text	30	EVENT	Instructor(s) of tasks to be trained. Either name or position is used.
			EVENTSUMMARY	
			SCHEDULE2	
ITEM	charact	10	VEHTYPE	
			WEAPTYPE	
JOB	text	8	LOREPAIR	Job number (if any)
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			ULOPSTAT	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
LANG	charact	2	ASSIGNED QUALS	Language Identifier
		10	SOLDIER	
LANG1	charact	2	SIDPERS	
LANG2	charact	2	SIDPERS	
LASTCHG	date	12	LOHAND LOHANDRET	unused
LAST_ACT_DT	charact	4	G3WAGJ	
LAST_COMBAT	charact	6	ASSIGNED SERVICE SIDPERS SOLDIER	Year and Month - Last Combat
LAST_ER	charact	6	ASSIGNED SERVICE SIDPERS SOLDIER	Year and Month - Last Efficiency Rating
LAST_PCS	charact	6	SIDPERS	
LAST_PERS_DT	charact	6	SIDPERS	
LAST_PERS_TP	charact	4	SIDPERS	
LAST_XACT_DT	charact	6	SIDPERS	
LAST_XACT_TP	charact	4	SIDPERS	
LEAVE1	integer	2	SIDPERS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
LEAVE2	integer	2	SIDPERS	
LIC	charact	2	OMTOE	
LIC_CLASS	charact	4	BNPERSONN	Drivers licence class
		10	BNPERSONN DRIVERS	
LIC_NO	charact	10	DRIVERS	License number
LIN	text	6	HANDRPT LOHAND LOHANDRET LOLINE LONSN T2406F TBNROLL TLOPHAND TLOPSTAT	
LINE	charact	6	B2MAGJ E3WAGJ EMTOE G3WAGJ X1EMTOE	Line Item Number
	integer	2	VEHTYPE WEAPTYPE OMTOE	
LOCAL	charact	40	SIDPERS	
LOCATION	charact	10	STATUS	Location of soldier if absent from duty
	text	3	LOEXCESSPART	
		20	EVENT EVENTSUMMARY SCHEDULE2	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
LOSS_DATE	text	6	UMR	Expected date of loss
M16A1CLASS	charact	1	TTWEAPONQUAL	
M16A1DATE	date	12	TTWEAPONQUAL	
M16A1SCORE	charact	4	TTWEAPONQUAL	
M203CLASS	charact	1	TTWEAPONQUAL	
M203DATE	date	12	TTWEAPONQUAL	
M203SCORE	charact	4	TTWEAPONQUAL	
M60CLASS	charact	1	TTWEAPONQUAL	
M60DATE	date	12	TTWEAPONQUAL	
M60SCORE	charact	4	TTWEAPONQUAL	
MAINT	text	1	LOSERVICE	Type of service to be performed (A, B, H, L, S... meanings unknown)
MARITAL	charact	1	ASSIGNED SIDPERS SOLDIER	Marital Status
		10	PERSONAL	
MEALCARD	charact	8	BNPERSONN SEPRATS SOLDIER	Mealcard Number
	integer	4	ASSIGNED ATTACHED UNITDATA	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
MEALCARD_DT	charact	6	ASSIGNED ATTACHED BNPERSONN SOLDIER	Date Mealcard Issued
	integer	4	UNITDATA	
MHDUE	integer	4	LOSERVICE	Miles/Hours when service is due
MHPERF	integer	4	LOSERVICE	Miles/Hours when service was performed
MHUNITS	text	1	LOSERVICE	M) or H)ours when service is next due.
MIL_EDUC	charact	1	SIDPERS	NCO Graduate/ Military Education Level
		10	ASSIGNED QUALS SOLDIER	
MISSION	text	8	EVENTSUMMARY EVENTTASK MISSION TASK TASKSUMMARY UNITSCORE	Mission Code
MODEL	text	7	T2406B	
		10	TLOPSTAT	
		12	LOCOMP LOLINE T2406B T2406F TBNROLL TLOPHAND TLOPSTAT	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
MOS	charact	5	ASSIGNED ATTACHED BNPERSONN OMTOE QUALS SIDPERS SKILLINVTRY SOLDIER UMR	Military Occupational Specialty Code
	text	5	MOS EVENTSOLDIER	
		8	MOSSCORE MOSSCORE2 SOLDIERSCORE	
MOVE_DESIG1	charact	2	SIDPERS	
MOVE_DESIG2	charact	2	SIDPERS	
MPC	charact	1	ASSIGNED ATTACHED BNPERSONN DAILYRPT DAILYSTATUS MPCCODES PERSONAL SIDPERS SOLDIER STATUS UMR	Military Personnel Class
MPCNAME	charact	8	MPCCODES	
MPCSEQ	integer	2	DAILYRPT DAILYSTATUS MPCCODES	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
MTITLE	text	50	TASKSUMMARY	
NAME	charact	8	SORTMPC	
		12	SOLDIERDD	
		26	RELIGION	
		27	LOHANDRET	
			ASSIGNED	
			ATTACHED	
			BNPERSONN	
			DRIVERS	
			GTRPT	
			PERSONAL	
			PRP	
			QUALS	
			SEPRATS	
			SERVICE	
			SIDPERS	
			SOLDIER	
			SONAMEX	
			SPECIAL	
			STATUS	
			UMR	
			UNITDATA	
			PTQUALV	
			TTPTQUAL	
			TTWEAPONQUAL	
		30	UNITS	
	text	27	TLOPHAND	
			TLOPSTAT	
			EVENTSOLDIER	
NATL_STOCK	charact	10	VEHTYPE	
			WEAPTYPE	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
NEWUPC	charact	5	SOLDIER	UPC of receiving unit if soldier is detached
NEW_DATE	charact	6	EMTOE	
NEW_LINE	charact	6	EMTOE	
NEXTDT	date	12	PTQUALV	
NIINO	text	9	T2406B	
NINO	text	13	T2406B	
NOMENCLATURE	charact	22	E3WAGJ	
NON_CMD_DEP	integer	1	SIDPERS	
NOTEVAL	integer	2	MOSSCORE MOSSCORE2	Number of "notevals" for a task.
NSN	text	13	HANDRPT LOBNPLLRPT LODOCREG LOEXCESSPART LOHAND LOHANDRET LONSN LOPLL LOPLLDESC LOPLLRPT LOREPAIR LOSERVICE TBNROLL TLOPHAND TLOPSTAT U2406F ULOPSTAT X1LODOCREG X1LOHAND X1LOPLL	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
NUM	integer	2	DAILYRPT DAILYSTATUS	
OCCUR	date	12	LOREPAIR T2406B TLOPHAND TLOPSTAT U2406F ULOPSTAT	Date action was taken
	text	25	T2406B	
OD	date	12	T2406B	
ODATE	date	12	U2406F	
OFF	integer	2	BNPERSONN	Flag to indicate officer
OFFICER_ASG	integer	2	UMR	Flag to indicate officer and assigned
OFFICER_AUT	integer	2	UMR	Flag to indicate officer and authorized
OH	integer	2	T2406F V2406F	
OJT_DT	charact	6	ASSIGNED QUALS SIDPERS SOLDIER	Year and Month of OJT Completion
OLDUPC	charact	5	SOLDIER	UPC of sending unit if soldier is attached
OM	integer	2	T2406F V2406F	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
ONHAND	integer	2	TBNROLL	
			TLOPSTAT	
		4	LOBNPLLRPT	
			LOEXCESSPART	
			LOHAND	
			LOHANDRET	
			LOPLL	
			LOPLLRPT	
			TLOPHAND	
			TLOPSTAT	
ORGANIC	charact	1	SOLDIER	Indicator if soldier is an SD gain
OS	integer	2	T2406F	
			V2406F	
OSI	text	1	LOLINE	O)rganization, S)tation, or I)nstallation
OS_PREF1	charact	2	SIDPERS	
OS_PREF2	charact	2	SIDPERS	
OS_PREF3	charact	2	SIDPERS	
OWNER	charact	15	USERS	
PARA	charact	3	EMTOE	
	integer	2	HOLDRPARAX	
			LOHOLDER	
			VEHTYPE	
			WEAPTYPE	
			OMTOE	
			UNITS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
PARENT	charact	10	UNITS	Unit name of next echelon up
PARTICIPANTS	text	20	EVENT	Brief indication of level of participation - i.e. ALL, BTY(-), SEL PERS.
			EVENTSUMMARY	
			SCHEDULE2	
PASS	integer	2	MOSSCORE	Number of passes recorded for a task.
			MOSSCORE2	
PAYROLL_NO	integer	2	UNITDATA	
		4	ASSIGNED	
PAY_ENTRY	charact	6	ASSIGNED	Pay Entry Basic Date (PEBD)
			GTRPT	
			SERVICE	
			SIDPERS	
			SOLDIER	
PBAC	charact	1	B2MAGJ	
			E3WAGJ	
			G3WAGJ	
PBIC	charact	1	B2MAGJ	
			E3WAGJ	
			G3WAGJ	
PD	integer	2	T2406F	
			V2406F	
	text	2	LOBNPLLRPT	
			LODOCREG	
			LOPLLRPT	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
PERCENTILE	integer	1	SIDPERS	
PERF	date	12	LOSERVICE	Date service was performed.
PF	float	4	TBNROLL	
	text	7	PTQUALV	
PGM_PROCURE	charact	2	SIDPERS	
PHOTO_SUSP	charact	6	ASSIGNED SERVICE SIDPERS SOLDIER	Year and Month of Photograph Suspense
PHYS_CATEG	charact	1	ASSIGNED QUALS SIDPERS SOLDIER	Physical Category Code
PLAN	text	10	SEPRATS	Planned personnel status
PLAN_BEGIN	date	12	STATUS	Begin date for planned status
PLAN_END	date	12	STATUS	End date for planned status
PLAN_STATUS	charact	11	STATUS	Place to enter a future status when it is known in advance
PNSN	text	13	LOCOMP	National Stock Number
POS	charact	4	OMPOSX OMTOE PRP SEPRATS UMR	Sidpers position code
		5	TRANSIENT	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
POSITION	charact	4	ASSIGNED	Duty Position
			ATTACHED	
			SOLDIER	
			SOPOSX	
		6	UNITDATA	
POSITION1	charact	4	SIDPERS	
POSITION2	charact	4	SIDPERS	
POS_FILLED	integer	2	UMR	Flag to indicate if position is assigned
POS_TITLE	charact	20	TRANSIENT	Title of position
		24	OMTOE	
			UMR	
	text	20	SEPRATS	
POTNTL_UPC1	charact	5	SIDPERS	
POTNTL_UPC2	charact	5	SIDPERS	
PRE_PROMO_DT	charact	4	SIDPERS	
PRE_PROMO_PT	integer	2	SIDPERS	
PRICE	float	4	LONSN	Price of item
			TBNROLL	
PRIV_DISPUTE	charact	1	SIDPERS	Indicator that there was a privacy dispute
			SOLDIER	
PROC_CODE	charact	1	B2MAGJ	
			E3WAGJ	
			G3WAGJ	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
PROFIC_PAY	charact	1	SIDPERS	
PROMO_IND	charact	1	ASSIGNED SIDPERS SOLDIER	Promotion Indicator
	integer	2	QUALS	
PROMO_MOS	charact	4	SIDPERS	
PULHES	charact	6	ASSIGNED QUALS SIDPERS SOLDIER	Physical Profile
PUSHUPS_PTS	integer	2	PTQUALV TTPTQUAL	
QTRLY_TRNG	date	12	PRP	Date of last quarterly refresher training
QTY_DUE	float	4	G3WAGJ	
QTY_ON_HAND	float	4	G3WAGJ	
	integer	2	VEHTYPE WEAPTYPE	
RACE	charact	1	ASSIGNED PERSONAL SIDPERS SOLDIER	Race
RANK	charact	3	OMTOE	Rank
		4	ASSIGNED ATTACHED GRADES GTRPT QUALS SOLDIER	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
RANK_DATE	text	6	UMR	Date of rank
RATER1	charact	6 9 16	SERVICE ASSIGNED SOLDIER	Name of first EER or OER rater
RATER2	charact	9 16	ASSIGNED SERVICE SOLDIER	Name of second EER or OER rater
RATER3	charact	9 16	ASSIGNED SERVICE SOLDIER	Name of third EER or OER rater
RATER_DATE	charact	6 9	ASSIGNED SOLDIER SERVICE	Effective Date of Rating
RATIO	float	8	LOBNPLLRPT	
RAW_PUSHUPS	integer	2	PTQUALV TTPTQUAL	
RAW_RUN	charact	6	PTQUALV TTPTQUAL	
RAW_SITUPS	integer	2	PTQUALV TTPTQUAL	
RD	integer	2	T2406F	
REASON	charact	15	STATUS	If applicable, reason soldier has a particular status

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
RECD_FROM	text	3	LOEXCESSPART	Received from
RECD_TURN	integer	4	LODOCREG	Quantity received or turned-in
REFS	text	12	EVENT	Reference document number from which training guidelines were obtained.e
			EVENTSUMMARY	
			SCHEDULE2	
REG_BR	charact	2	ASSIGNED	Regimental Branch
			SIDPERS	
			SOLDIER	
		4	UNITDATA	
REG_HOME	charact	2	SIDPERS	Regimantal Home
			UNITDATA	
		10	ASSIGNED	
			SOLDIER	
REG_NO	charact	4	ASSIGNED	Regimental Number
			SIDPERS	
			SOLDIER	
	integer	2	UNITDATA	
RELIGION	charact	2	SIDPERS	Religion
		5	PERSONAL	
		10	ASSIGNED	
		26	SOLDIER	
REMARK	text	6	TLOPSTAT	
		17	TLOPSTAT	
		20	LODOCREG	
		40	LOEXCESSPART	
			LOREPAIR	
			LOSERVICE	
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			ULOPSTAT	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
REPORT_DATE	charact	6	ASSIGNED SOLDIER UNITDATA	Date Assigned to this Unit
	text	6	UMR	
REPORT_DATE1	charact	6	SIDPERS	
REPORT_DATE2	charact	6	SIDPERS	
REQ	integer	2	TBNROLL	
	text	2	TLOPSTAT	
		8	LOREPAIR T2406B TLOPHAND TLOPSTAT ULOPSTAT	
REQD	integer	4	LOBNPLLRPT LOPLLRPT	
RETRAIN	date	12	TASK	Time required to re-train decayed skills.
RET_OS	charact	6	ASSIGNED SIDPERS SOLDIER	Date Returned from Overseas
	integer	1	SERVICE	
RICC	charact	1	EMTOE G3WAGJ	
	text	1	TBNROLL	
RLIN	charact	6	TBNROLL UBNROLL	
	text	6	LOHAND LOHANDRET T2406F TLOPHAND TLOPSTAT V2406F X4LOHAND	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
RMK	charact	3	EMTOE	
RMKS	charact	5	OMTOE	Remarks (coded)
		25	PTQUALV	
			TTPTQUAL	
RQ	integer	2	T2406F	
RQD	float	4	G3WAGJ	
			OMTOE	
			SKILLINVTRY	
	integer	4	EMTOE	
			HANDRPT	
RQD_READ_BEG	date	12	PRP	Date that required reading was begun
RQD_READ_END	date	12	PRP	Date that required reading was finished
RQUST_FOR	text	12	LODOCREG	Requestor's Identification
RQUST_QTY	integer	4	LODOCREG	Quantity requested
RSC	charact	1	SIDPERS	
RUN_PTS	integer	2	PTQUALV	
			TTPTQUAL	
SACT	text	1	U2406F	
SASI	charact	2	ASSIGNED	Secondary Additional Skill Identifier
			SIDPERS	
			SOLDIER	
		5	QUALS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
SAS_TEAM	charact	5	PRP	Sealed Authentication system team (BTRY)
SCHEDULER	text	12	EVENT SCHEDULE2	Ingres username of individual who added the event to the schedule.
SCTY_CLNC	charact	1 2 10	SIDPERS BNPERSONN SOLDIER UMR ASSIGNED QUALS	Security Clearance
SCTY_STATUS	charact	1 4 12	SIDPERS SOLDIER ASSIGNED QUALS	Status of Security Clearance
SEC	text	1	LONSN TLOPHAND	Durability Code
SELECT_CODE	charact	1	EMTOE	
SEMI_RETEST	date	12	PRP	Date of last semi-annual retest
SEMI_SCORE	integer	1	PRP	Score from last semi-annual retest
SENT_TO	text	3	LODOCREG	Recipient Identification
SEP_PGM	charact	3	SIDPERS	
SEP_RATIONS	charact	1	BNPERSONN SOLDIER	Flag to indicate separate rations

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
SEQ	integer	2	SCHEDULER	Number of events created by this scheduler used to maintain a sequence counter.
SEQNO	integer text	2 3	SKILLINVTRY LOHAND LOHANDRET T2406B T2406F TLOPHAND TLOPSTAT U2406F X5LOHAND	Flag for break in report
SEQUENCE	integer	2	SORTMPC	
SERIAL	text	12	LOHAND LOHANDRET LOREPAIR LOSERVICE T2406B TLOPHAND TLOPSTAT U2406F ULOPSTAT X1LOHAND	Serial number
SERIAL_CODE	charact	1	G3WAGJ	
SERIAL_NO	charact	10	B2MAGJ	
SERVICE_COMP	charact	1	SIDPERS	
SEX	charact	1	ASSIGNED ATTACHED PERSONAL SIDPERS SOLDIER	Sex

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
SIDE	charact	4	PRP	Red or blue side in SAS team
SITUPS_PTS	integer	2	PTQUALV TTPTQUAL	
SKILLINV	charact	8	SOLDIERDD	Flag to indicate field is in Skill inventory report
SM	integer	2	T2406F V2406F	
SMOS	charact	5	ASSIGNED SIDPERS SOLDIER UMR	Secondary MOS
		10	QUALS	
SPEC_DESIG	charact	1	G3WAGJ	
SPEC_PAY	charact	5	SOLDIER	Pay for special duty
SPEC_PAY1	charact	5	SIDPERS	
SPEC_PAY2	charact	5	SIDPERS	
SPTM	integer	2	U2406F	
SQT_CODE	charact	1	SIDPERS	
SQT_DATE	charact	6	SOLDIER	Date of SQT test
SQT_DT1	charact	6	SIDPERS	
SQT_DT2	charact	6	SIDPERS	

FIELD/ TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
SQT_MOS	charact	4	SIDPERS	
SQT_SCORE	integer	2	SIDPERS SOLDIER	Skill Qualification Test Score
SS	integer	2	T2406F V2406F	
SSN	charact	9	ASSIGNED ATTACHED BNPERSONN PERSONAL QUALS SERVICE UMR UNITDATA PTQUALV TTPTQUAL TTWEAPONQUAL	Social Security Number
	text	9	LOHANDRET LOHOLDER BNPERSONN DRIVERS DRIVSSNX GTRPT PRP SEPRATS SIDPERS SOLDIER SOSSNX SPECIAL STATSSNX STATUS UMR EVENTSOLDIER MOSSCORE MOSSCORE2 SCHEDULER SOLDIERSCORE TTPTQUAL XEVSOLD1 XSOSCORE3	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
STATSEQ	integer	2	DAILYRPT	
			DAILYSTATUS	
			STATCODES	
STATUS	charact	12	DAILYRPT	
			DAILYSTATUS	
			STATCODES	
	text	1	LOREPAIR	
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			U2406F	
			ULOPSTAT	
			SOLDIERSCORE	
		2	UNITSCORE	
		3	UMR	
		6	EVENT	
			SCHEDULE2	
		10	SEPRATS	
		11	UMR	
STATUS_DATE	charact	6	BNPERSONN	Date of personnel status
			DRIVERS	
STOCK_NO	charact	14	G3WAGJ	National Stock Number
		15	B2MAGJ	
			E3WAGJ	
SUBEVENT	text	1	EVENT	Alpha character indicating an event attached to a "main" event.
			SCHEDULE2	
SUBHAND	text	3	LOHAND	unused
			LOHANDRET	

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FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
SUBLINE	charact	6	B2MAGJ	
			E3WAGJ	
			G3WAGJ	
	integer	1	OMTOE	
SUBUNIT	charact	2	UNITS	First two characters of SIDPERS position code - unused
SUSP_FAVOR	charact	1	SIDPERS	
			SOLDIER	
TASK	text	12	EVENTSOLDIER	Task Code
			EVENTSUMMARY	
			EVENTTASK	
			EVENTUNIT	
			MOSSCORE	
			MOSSCORE2	
			SCHEDULE2	
			SOLDIERSCORE	
			TASK	
			TASKSUMMARY	
			UNITSCORE	
			XEVTASK1	
			XTASK1	
TD1	text	11	T2406B	
TD2	text	11	T2406B	
TD3	text	11	T2406B	
TDY1	integer	2	SIDPERS	
TDY2	integer	2	SIDPERS	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
TEMP	integer	2	PTQUALV	
			TTPTQUAL	
TERM_SERV	charact	1	SIDPERS	Term of Service
		6	SERVICE	
	integer	1	ASSIGNED	
			SOLDIER	
TEXT	charact	10	CIVEDCODES	Description
			MILEDCODES	
		12	CLEARANCE	
		20	SCTYSTATS	
TF_BADGE	charact	5	SOLDIER	TACFIRE Badge Number
		6	UNITDATA	
	integer	2	ASSIGNED	
			ATTACHED	
TIDP	integer	4	HOLDRPARAX	
			X1EMTOE	
			X1LODOCREG	
			X1LOHAND	
			X1LOPLL	
			X2LOHAND	
			X3LOHAND	
			X4LOHAND	
			X5LOHAND	
			DRIVSSNX	
			OMPOSX	
			SONAMEX	
			SOPOSX	
			SOSSNX	
			STATSSNX	
			XARTEPARTEP	
			XEVENT1	
			XEVSOLD1	
			XEVTASK1	
			XEVUNIT1	
			XSOSCORE1	
			XSOSCORE2	
			XSOSCORE3	
			XTASK1	
			XUNSCORE1	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
TIME	date	12	LODOCREG	Date and time record was entered
TITLE	text	50	MOS ARTEP MISSION	
		120	EVENTSUMMARY TASK	
TM	text	30	LONSN	Applicable Technical Manual
TOT	integer	2	U2406F	
TOTBREAK	integer	2	DAILYRPT DAILYSTATUS	
TOT_PTS	integer	2	PTQUALV	
TRAIN	date	12	TASK	Lenght of time required for initial training.
TRAIN_STATUS	charact	5	DRIVERS	Training status
TSEQ	text	3	T2406F V2406F	
TTITLE	text	120	TASKSUMMARY	
TUPLE	integer	2	TLOPSTAT	
		4	T2406B ULOPSTAT	
TYPE	text	4	LOCOMP	COEI, BII, or AAL
		20	EVENT EVENTSUMMARY SCHEDULE2	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
UI	text	2	LOCOMP	Unit of issue
			LOLINE	
			TBNROLL	
			TLOPHAND	
			TLOPSTAT	
UIC	charact	5	B2MAGJ	Unit Identification Code
			E3WAGJ	
			EMTOE	
			G3WAGJ	
			TBNROLL	
			UBNROLL	
			X1EMTOE	
		10	USERS	
	text	5	HANDRPT	
			LOHAND	
			LOHANDRET	
			LOHOLDER	
			LOPLL	
			LOPLLRPT	
			T2406B	
			TLOPHAND	
			TLOPSTAT	
			X2LOHAND	
			X3LOHAND	
ULTIMAT_UPC1	charact	5	SIDPERS	
UNIFORM	text	12	EVENT	Type of uniform to be worn - i.e FIELD, DUTY, PT.
			EVENTSUMMARY	
			SCHEDULE2	
UNIT	charact	10	EMTOE	Unit name from Omtoe table
			OMTOE	
			SOLDIER	
			UNITS	
			MOSSCORE2	
			PTQUALV	
			TTPTQUAL	
			TTWEAPONQUAL	
	text	10	LOHAND	
			LOHANDRET	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
			TLOPHAND	
			SEPRATS	
			EVENTSOLDIER	
			EVENTSUMMARY	
			EVENTTASK	
			EVENTUNIT	
			UNITSCORE	
			XEVUNIT1	
		11	MISSION	
UNITCODE	charact	8	UNITS	
	text	8	EVENTUNIT	
UNITMAN	charact	7	SOLDIERDD	Flag to indicate field is in Unit Manning report
UNITSEQ	integer	2	UMR	Sequence number of unit
UNIT_ISSUE	charact	2	B2MAGJ	
			E3WAGJ	
			G3WAGJ	
UNIT_NAME	charact	30	UMR	Name of section
UNIT_PRICE	float	4	G3WAGJ	
			VEHTYPE	
			WEAPTYPE	
UPC	charact	5	ASSIGNED	Unit Processing Code (UIC)
			ATTACHED	
			BATTERYCODES	
			BNPERSONN	
			DRIVERS	
			GTRPT	
			OMTOE	
			SOLDIER	
			STATUS	
			UMR	
			UNITDATA	
			UNITS	
			MOSSCORE	
			MOSSCORE2	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
UPC1	charact	5	SIDPERS	
UPC2	charact	5	SIDPERS	
USA	text	8	LOHANDRET TLOPHAND TLOPSTAT	
		10	LOHAND TLOPSTAT	
USERNAME	charact	13	USERS	
VALUE	charact	1	SORTMPC	
VERIF_DT	charact	1	QUALS	Year Verified Secondary MOS
		6	ASSIGNED SIDPERS SOLDIER	
VERIF_SMOS	charact	1	ASSIGNED SIDPERS SOLDIER	Verification Indicator for Secondary MOS
		2	QUALS	
VSSSN	charact	1	SIDPERS	
WARRANT	integer	2	BNPERSONN	Flag to indicate warrant
WARRANT_ASG	integer	2	UMR	Flag to indicate warrant and assigned
WARRANT_AUT	integer	2	UMR	Flag to indicate warrant and authorized
WARRENT	integer	2	BNPERSONN	

FIELD / TABLE CROSS REFERENCE

Field	Type	Size	Table	Field Contents
WEIGHT	integer	2	MISSION	
			PTQUALV	
			TASK	
			TTPTQUAL	
ZEROBAL	integer	2	LOBNPLLRPT	

APPENDIX D

TERMINALS AND COMMUNICATION LINES

The design and layout of ATUTMS terminal communication lines are documented in this appendix.

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ATUTMS CRT CONNECTOR LOCATIONS

CRT CONNECTOR	LOCATION
1	BATTALION CONFERENCE ROOM
2	BATTALION CONFERENCE ROOM
3	BATTALION CONFERENCE ROOM
4	BATTALION CONFERENCE ROOM
5	BATTALION CONFERENCE ROOM
6	BATTALION CONFERENCE ROOM
7	PAC
8	PAC
9	PAC
10	XO OFFICE
11	CSM OFFICE
12	CMDR OFFICE
13	HHB TRAINING ROOM
14	HHB SUPPLY ROOM
15	A BATTERY TRAINING ROOM
16	A BATTERY SUPPLY ROOM
17	B BATTERY TRAINING ROOM
18	B BATTERY SUPPLY ROOM
19	S-2
20	S-3
21	C BATTERY TRAINING ROOM
22	C BATTERY SUPPLY ROOM
23	FIST
24	SVC BATTERY TRAINING ROOM
25	SVC BATTERY SUPPLY ROOM
26	BATTALION SUPPLY ROOM
27	MOTOR POOL
28	MOTOR POOL
29	MOTOR POOL C/SVC BATTERY
30	MOTOR POOL A/B BATTERY

ATUTMS INTERCONNECT WIRE LIST

SITES 1-7   BUILDING 3212

SITE #	LOCATION	CONNECTOR PIN		COLOR CODE
1	BN CONFERENCE ROOM	CRT	A	BRN
			B	BLK
			C	RED
			D	BLK
2	BN CONFERENCE	CRT	A	ORG
			B	BLK
			C	YEL
			D	BLK
3	BN CONFERENCE	CRT	A	GRN
			B	BLK
			C	BLU
			D	BLK
4	BN CONFERENCE	CRT	A	WHT
			B	BLK
			C	RED
			D	BRN
5	BN CONFERENCE ROOM	CRT	A	ORG
			B	RED
			C	YEL
			D	RED
6	BN CONFERENCE	CRT	A	GRN
			B	RED
			C	BLU
			D	RED
7	PAC	CRT	A	WHT
			B	RED
			C	BLU
			D	GRN
		COM	A	WHT
		COM	B	GRN

NOTE: SITES 1-7 ARE CONNECTED TO THE ATUTMS SYSTEM INTERCONNECT
PANEL BY A SINGLE 15 PAIR CABLE.

ATUTMS INTERCONNECT WIRE LIST

SITES 8-12   BUILDING 3212

SITE #	LOCATION	CONNECTOR PIN	COLOR CODE
8	PAC	CRT A	BLK
		B	BRN
		C	RED
		D	GRN
		COM A	BLU
		B	GRN
9	PAC	CRT A	ORG
		B	BLK
		C	YEL
		D	BLK
		COM A	RED
		B	BLU
10	XO OFFICE	CRT A	GRN
		B	BLK
		C	BLU
		D	BLK
		COM A	RED
		B	GRN
11	CSM OFFICE	CRT A	WHT
		B	BLK
		C	RED
		D	BRN
		COM A	GRN
		B	WHT
12	BN CMDR OFFICE	CRT A	ORG
		B	RED
		C	YEL
		D	RED
		COM A	RED
		B	WHT

NOTE: SITES 8-12 ARE CONNECTED TO THE ATUTMS SYSTEM INTERCONNECT
PANEL BY A SINGLE 15 PAIR CABLE.

ATUTMS INTERCONNECT WIRE LIST

SITES 13-14   BUILDING 3213

SITE #	PAIR	CONNECTOR PIN	*COLOR CODE
13	37	CRT A	WHT/BLU
		B	BLU/WHT
	38	C	RED/BLU
		D	BLU/RED
	39	COM A	ORG/WHT
		B	WHT/ORG
	40	C	GRN/WHT
		D	WHT/GRN
		SPARE	WHT/GRY
		SPARE	GRY/WHT
14	41	CRT A	WHT/BRN
		B	BRN/WHT
	42	C	BLU/RED
		D	RED/BLU
	43	COM A	ORG/WHT
		B	WHT/ORG
	44	C	GRN/WHT
		D	WHT/GRN
	45	SPARE	GRA/WHT
		SPARE	WHT/GRY
N/A	46-48	NOT USED	

* COLOR CODE OF CABLE FROM BOILER ROOM TO SINGLE CHANNEL BOX (STRIPE/BASE).

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ATUTMS INTERCONNECT WIRELIST

SITES 15-20   BUILDING 3214

SITE #	PAIR	CONNECTOR PIN	COLOR CODE
15	1	CRT A	SAME AS SITE 14
		B	
	2	C	
		D	
	3	COM A	
		B	
	4	C	
		D	
		SPARE	
		SPARE	
16	5	CRT A	SAME AS SITE 14
		B	
	6	C	
		D	
	7	COM A	
		B	
	8	C	
		D	
		SPARE	
		SPARE	
17	9	CRT A	SAME AS SITE 14
		B	
	10	C	
		D	
	11	COM A	
		B	
	12	C	
		D	
		SPARE	
		SPARE	
18	13	CRT A	SAME AS SITE 14
		B	
	14	C	
		D	
	15	COM A	
		B	
	16	C	
		D	
		SPARE	
		SPARE	
19	17	CRT A	SAME AS SITE 14
		B	

```
                    18              C
                                    D

BUILDING 3214 CONTINUED

                    19          COM A
                                    B
                    20              C
                                    D
                                 SPARE
                                 SPARE

20                  21          CRT A          SAME AS SITE 14
                                    B
                    22              C
                                    D
                    23          COM A
                                    B
                    24              C
                                    D
                                 SPARE
                                 SPARE

N/A                 25-36       NOT USED
```

ATUTMS INTERCONNECT WIRE LIST

SITES 21-26   BUILDING 3215

SITE #	PAIR	CONNECTOR PIN	COLOR CODE
21	51	CRT A	SAME AS SITE 14
		B	
	52	C	
		D	
	53	COM A	
		B	
	54	C	
		D	
		SPARE	
		SPARE	
22	67	CRT A	SAME AS SITE 14
		B	
	68	C	
		D	
	69	COM A	
		B	
	70	C	
		D	
		SPARE	
		SPARE	
23	59	CRT A	SAME AS SITE 14
		B	
	60	C	
		D	
	61	COM A	
		B	
	62	C	
		D	
		SPARE	
		SPARE	
24	71	CRT A	SAME AS SITE 14
		B	
	72	C	
		D	
	73	COM A	
		B	
	74	C	
		D	
		SPARE	
		SPARE	
25	55	CRT A	SAME AS SITE 14

			B	
	56		C	
			D	
	57	COM	A	

BUILDING 3215 CONTINUED

			B	
	58		C	
			D	
		SPARE		
		SPARE		
26	63	CRT	A	SAME AS SITE 14
			B	
	64		C	
			D	
	65	COM	A	
			B	
	66		C	
			D	
		SPARE		
		SPARE		
N/A	75-86	NOT USED		

ATUTMS INTERCONNECT WIRE LIST

SITES 27-28   BUILDING 3227

SITE #	PAIR	CONNECTOR PIN	COLOR CODE
N/A	87-90	NOT USED	
27	91	CRT A	
		B	
	92	C	
		D	
	93	COM A	
		B	
	94	C	
		D	
28	95	CRT A	
		B	
	96	C	
		D	
30	87	CRT A	
		B	
	88	C	
		D	
29	89	CRT A	
		B	
	90	C	
		D	
N/A	91-100	NOT USED	
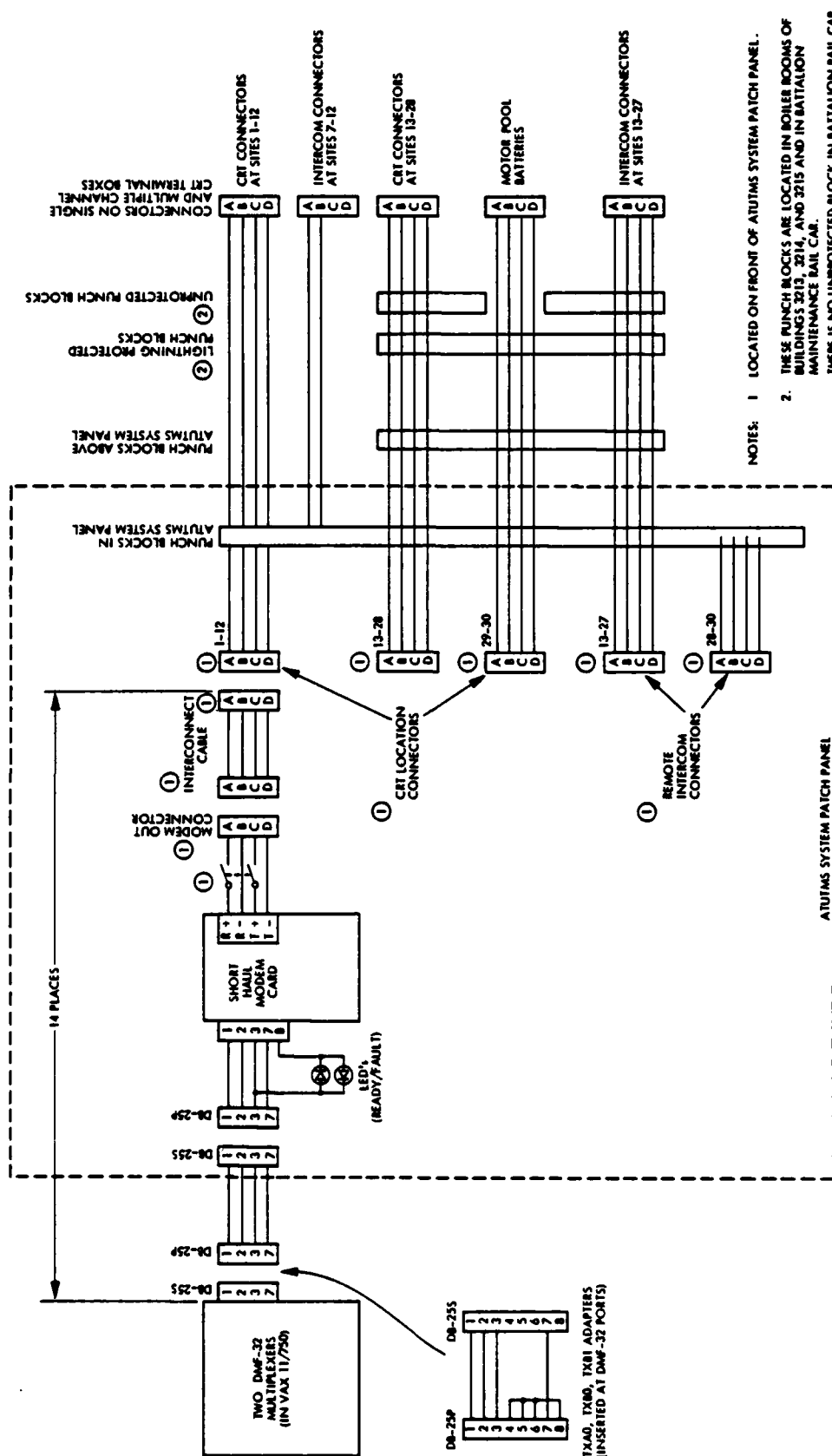
Atutms System Interconnect Schematic

Atutms System Interconnect Schematic (Cont'd)